LiNC-NET 5.11.2 for Windows

Administrator Guide

Standalone and Multi-User
38-10051-001
REV: A

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Release Notes for LiNC-NET NT/98 Version 5.11.2

1. **Linc-ID-** This feature allows the operator to take pictures and print badges.

2. **Bulk Download-** Bulk Download allows for a faster method of downloading the database to the panels over a LAN. Previously, downloads were done using the "primary port," sending records one at a time. Bulk Download is accomplished by using a "secondary port." The "secondary port" is a TCP/IP connection used to send the database in "big" blocks.

3. **Department by Name-** The department field in the card definition record is updated by making a selection in a window containing all of the defined departments. New departments are defined by using the Add button, and the existing departments can be changed or deleted using the Edit and Delete buttons in the Department window. The Find field at the top of the Department window facilitates the search for a department by allowing the user to enter the department name.

4. **2000 Authorization Groups-** The number of authorization group records has been increased to 2000. A warning is displayed before a delete of the authorization group is processed.

5. **1000 Mapped Time Periods-** The number of time periods has been increased to 1000. Time periods 2 through 999 are user-definable. Each MicroLPM has 32 time periods-0, 1, and thirty time periods selected from the range of 2 and 999. Each user-definable time period also has a name field associated with it.

6. **Alarm Break-**Through- Priority zero (0) alarms will force the alarm task to be the topmost task.

7. **Display and Data Entry-** The LiNC-NET windows now fill the entire screen and have border icons-minimize, maximize, and close. The speed buttons are now on tool bars that can be rearranged. Speed buttons are disabled rather than hidden when the operator does not have access to them. Speed buttons for door status, input status, and output status have been added. Pressing a number key in an edit field or time period, authorization group, affiliation, department, and some card numbers will bring up a window which will allow the operator to make a selection from a list.

8. **Latched Alarm-** SIM firmware provides a latching option for each alarm point. When the latching option is selected to input, only the first occurrence of an alarm condition will be reported to the host. All subsequent alarm conditions will be ignored until acknowledgement is received from the host. The latching option has three modes-Standard, Access, or Bypass. All alarm conditions are monitored in the Standard mode, whereas only the trouble conditions are monitored in the Access mode. In the Bypass mode all alarm conditions all alarm conditions are ignored. If an input is defined as a latching, an alarm definition record is automatically added. Input alarms for latched inputs CANNOT be shunted or deleted. Attempting to delete an alarm definition record for a latched input will cause the message, "Unable to delete record for latched alarm," to be displayed.

9. **Baud Rates-** New baud rates: 14.4K, 19.2K, 38.4K, 56K, 115.2K, 128K, and 256K.

10. **Delete Card Correction-** This release corrects the problem in which a card is still usable at the panel after deleting it from the database.

11. **Program Level-** The operator is no longer allowed to set the program level for the Card Personal menu to a value higher than the value for the Card Change menu on the User page. The problem in which menu items were not correctly shown or hidden when program levels restricted the operator's access to some of the menu items has been corrected.

12. **Floor Group Range Check-** on the card screens, illegal values are not accepted in the floor group fields.

13. **Card Add-** Personal data is no longer copied from the template when adding cards. (STR#97121007)

14. **Out#1/ALM-** On the Hardware page of the MicroLPM Setup screen, the "OUT#1/ ALM" checkbox is used for both OUT#1 and the ALM boards.

15. **Report-** As child windows are opened in the report task, the parent window is minimized. The parent window is restored when its child widow is closed. The problem of duplicate tabs on the report screens has been corrected.

16. **ConfigLN-42** "Allow Uploads" enables the UPLOAD icon in LiNC-NET. The UPLOAD of the database from a Panel should be done sparingly (if at all).

17. **Photo Trace-** a new feature that allows the user to assign a photo to each cardholder. When a card is used, the cardholders photo can be displayed. Should a card be denied, an access option for allowing the door open from a PC is possible.

18. **Modem Initialization String-** the modem initialization string for a port is now specified in the Host Computer screen. To accommodate the additional components, the Loop and Port definition have been split into two pages. The 'Port' page contains the modem initialization fields.

19. **Floor Buttons-** Sense Inputs 56-71 may be defined as Floor button Type sense inputs. However, MicroELV firmware must be version 5.9.11 or later. Currently this firmware is still under development to support destination reporting with a single floor latching resource.

20. **Renewable Shunt-** this option has been added to the Features page of the **MicroLPM** setup screen to allow the user to enable this feature.

21. **Supervised Alarms-** a checkbox has been added to the Input screen to allow the user to indicate that an input is supervised.

22. **Corp_1000-** The reader type "Fortune500" has been renamed to "Corp_1000"

23. **SIM32-** the SIM32 has been added to the Model list in the MicroLPM setup/hardware screen.

24. **Daylight Savings-** The start and the stop dates for the daylight savings feature are now initialized to March 3, 1980 and October 29, 1980, respectively.

25. **Card Format Settings: Global/Park and PIN/Date-** Defaults for card format settings have been changed to Global and PIN. Making a selection from the drop down list for one of these fields will automatically change the selection for the other.

26. **Active Alarm Files-** The active alarm files (ActiveTA and ActiveXA) are no longer in the list of files that can be created in ConFigLN. They are re-created each time LiNC-NET is started.

27. **Password Valid Time Period-** If an attempt is made to sign on at a time when the time period for the password is not active, “Time period not active” message is displayed.

28. **Program Level for Input Status-** The program level for the Input Status command has been corrected.

29. **Loop/Port Configuration-** While the “Request Online” is checked for a MicroLPM, the configuration cannot be changed for the loop/port used by that panel.

30. **Loop/Port Configuration-** Added Loop Ports 5-13 in Host Setup icon.

31. **Com/Port Configuration-** Added Comports 5-13 in the Host Setup icon.

32. **Concentrator Configuration-** Added Concentrators in the Host Setup when configured to use 1-20.

33. **ConfigLN-**
    - The Task Communications options on the Main page have been changed to allow configuration for workstations and concentrators.
    - EPISUITE in use has been renamed to Photo imaging.
    - Modem page has been removed. Modem initialization strings are specified on the Host Computer/Port screen.
    - The LiNC-ID box has been added toenable the icon in the LiNC-NET system side.
    - The Upload checkbox has been added toenable the icon in the LiNC-NET user side.
    - ELV: Max One button box has been added to enable sense input floor buttons 56-71 the ELV firmware 5.9.11 or higher.
    - Concentrator on Network radial button has been added to setup the system configuration with the concentrators.
    - I Am Concentrrator radial button has been added to setup the PC as a concentrator.

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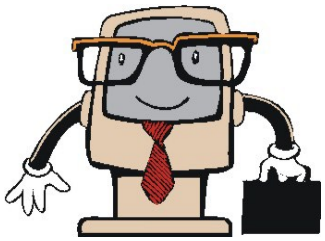
Introduction



Welcome to LiNC-NET for Windows-NT/95/98, the programming software from PCSC. This user-friendly, PC-based access control manager is simple to operate and provides Help screens along the way to make operation even easier.

LiNC-NET for Windows-NT/95/98 operates under the Microsoft WINDOWS-NT/95/98 operating system. The host PC should be dedicated to the access control system to ensure security integrity and management efficiency. Other WINDOWS-NT/95/98 applications should not be running concurrently with LiNC-NET for Windows-NT/95/98.

LiNC-NET has been designed to function on two separate levels: **Administrator** and **User**. Though there is an overlap in the information provided for both the System and User commands, this manual has been designed to provide information for the Administrator level of LiNC-NET. To obtain a complete understanding of LiNC-NET, this manual should be used in conjunction with the LiNC-NET for Windows- NT/95/98 User Manual.

This manual was designed for LiNC-NET system administrators. Although this manual provides a general survey of the hardware and system setup, the Installation Manual(s) specific to your panel(s) should be used in conjunction with this system guide. The Help menus provided on-screen will usually be sufficient to enter the proper data. This manual augments those screens and will detail certain fields, definitions, and procedures where needed.

Panel Installation Manuals

MicroLPM	(P/N 33-10019-001)
IQ	(P/N 33-10036-001)
SIM	(P/N 33-10037-001)
Ultimate	(P/N 33-10035-001)

Peripheral Installation Manuals

Modem	(P/N 33-10052-001)
Stallion	(P/N 33-10060-001)
Lantronix	

For clarity in describing the use of LiNC-NET, the MicroLPM, IQ, SIM and Ultimate PCBs will be referred to as the PANEL.

Installation and Setup

Along with the Help screens, this guide describes how to setup your system quickly and easily. In addition, the worksheets provided in the back of the guide will assist in organizing the information, door overview, access operations, door input and output actions, card additions, uploading records from the panel, and password assignments. After the initial system foundation has been setup, refer to the LiNC-NET for Windows-NT/95/98 User Guide (Part#- 37-10050-001) for the day-to-day operation and maintenance of your system. The User Guide provides information on entering data regarding card assignment, time periods, downloading records to the Panel(s), and door operations.

To make things easier for you, we have also implemented information boxes:

These information boxes will appear in areas to give warnings or reiterate important points

These information boxes will appear in areas to define or clarify some of LiNC-NET's properties

An example is the information box that was on the previous page:

For clarity in describing the use of LiNC-NET, the MicroLPM, IQ, SIM and Ultimate PCBs will be referred generally as PANEL.

Step 1- Before You Begin- Installation Requirements

Software

To install LiNC-NET for Windows-NT/95/98, the following requirements must be met:

-Windows NT Workstation Version 4.0 S/P 4, Windows 95, or Windows 98 installed on the host computer.
-Knowledge of mouse and keyboard use in the WINDOWS-NT/95/98 environment.

Hardware

Compare your computer hardware features with the chart listing the requirements for proper operation of LiNC-NET. If you have any questions regarding the computer you will be using for this application, call PCSC Customer Support at (310) 638-0400 ext. 694.

Hardware item	Min. Requirement
CPU	IBM PC or equivalent: Pentium (minimum 200 MHz for Host, 133 MHz for Work Station), Windows-NT version 4.0, or 95, Award BIOS, Intel 82430 VX PCI Chipset
RAM	64 MB for Host & 32 MB for Workstation
Hard Drive	1.2 GB IDE
Diskette Drive	3.5 in., 1.44 MB
CD ROM	4X CD ROM drive
Monitor	SVGA, 640 x 480, 16 color
Keyboard	AT type
Mouse, Trackball	WINDOWS compatible Bus or PS2 Mouse
Parallel Port	LPT1 (Address 0378h IRQ7) preferred but LPT2 or LPT3 are acceptable
Serial Port	2 RS-232, 1 RS485 (COM 1 then COM 4 optically isolated preferred).
U.P.S. (Uninterruptable Power Supply)	420 VA for PC & monitor
Network Interface Card (NT compatible)*	10-100 MBs Ethernet LAN card
Zip Drive	LS-120 (optional- available via PCSC) 1.44MB – 20MB of Archived Information per diskette

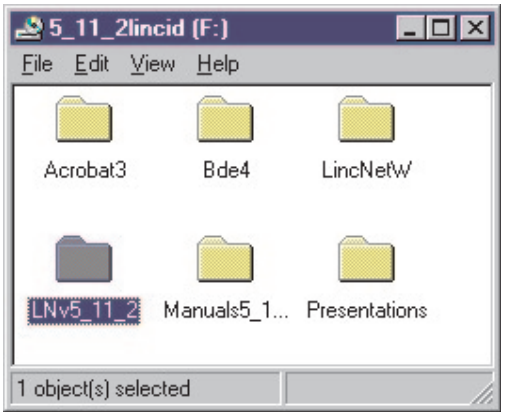
*** Optional**- NIC (Network Interface Card) is required only in a Multi-User LiNC-NET environment

Step 2-The Initial Installation

The Initial Installation

To Begin

1. Close any Windows programs that you are currently running before beginning the installation.
2. Insert the **LiNC-NET v. 5.11.2** CD-ROM into the CD-ROM drive.
3. Click on the **My Computer** icon on your desktop.
4. Your CD-ROM drive should display **5.11.2.** Double-click on **5.11.2**.
5. You will see several folders in the **5.11.2** window:



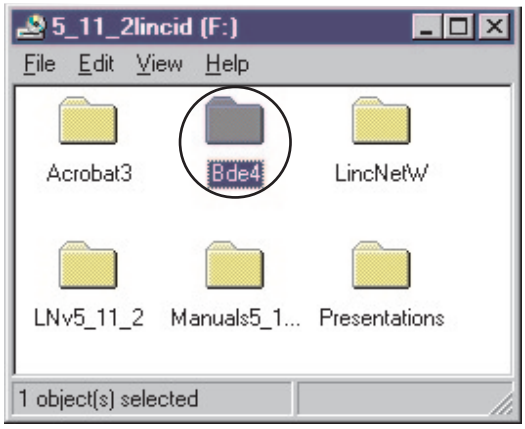
From this location you will install the **BDE-4** and **5.11.2** programs which form the two halves of the **LiNC-NET 5.11.2** program. We will start with the BDE-4 program.

The Installation of LiNC-NET is in two parts because it is comprised of
-5.11.2 PCSC LiNC-NET Application Software
-Borland" Data Base Engine Software

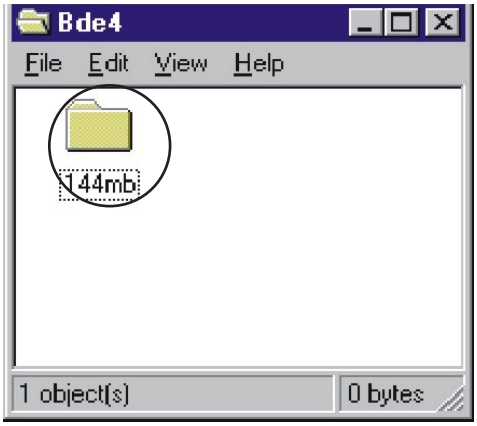
BDE-4- Borland Data Base Engine Version 4 software permits the operation of a database for use by LiNC-NET (the installation will also read, write and update an existing Borland Database by the LiNC-NET Application program)

Installing BDE-4

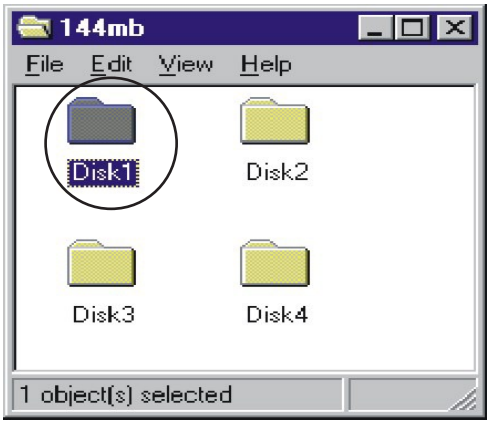
1. Double-click on the **BDE-4** folder.



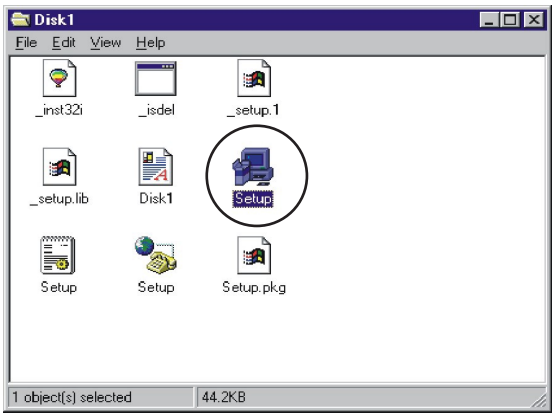
2. In the **BDE-4** window, double-click on the **144mb** folder.



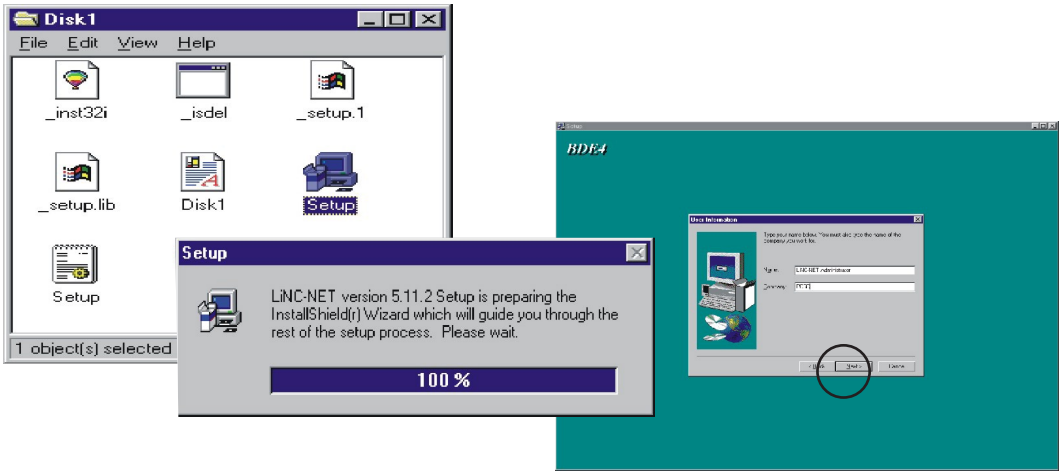
3. In the **144mb** window, double-click on **Disk 1**.



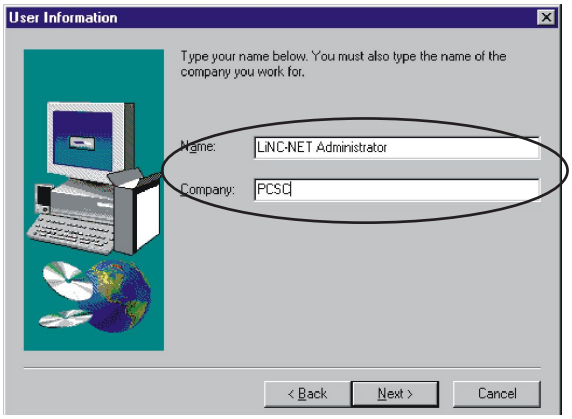
4. In the **Disk 1** window, double-click on the setup.exe application.



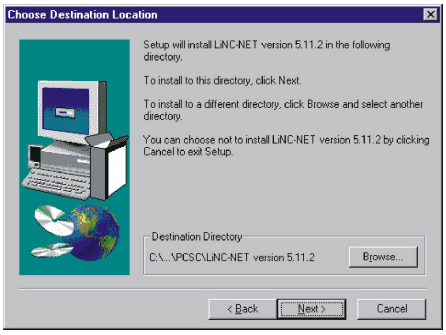
5. This will bring you to the **Install Shield Wizard**", which will lead you through the rest of the **BDE-4** installation. The initial page will be the **Welcome** page, which will state that you will be installing **BDE-4** on your hard drive. Click the **Next>** button.



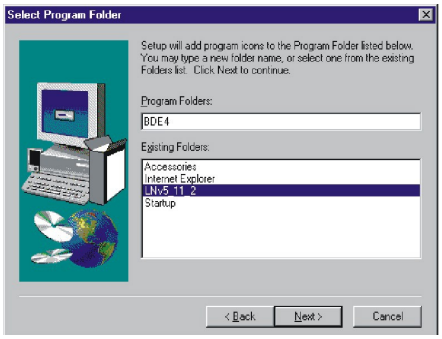
6. You will then be brought to the User Information page. Type in your *Name* and *Company* in the appropriate spaces. Click the **Next>** button.



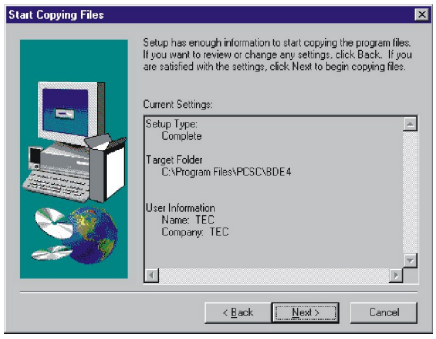
7. You will be brought to the **Choose Destination Location** page. A default directory (**C:\Program Files\PCSC\ BDE4**) will have already been established for you. Click the **Next>** button.


Choose Destination Location
Setup will install LiNC-NET version 5.11.2 in the following directory.
To install to this directory, click Next.
To install to a different directory, click Browse and select another directory.
You can choose not to install LiNC-NET version 5.11.2 by clicking Cancel to exit Setup.
Destination Directory
C:\...\PCSC\LiNC-NET version 5.11.2
Browse...
< Back
Next >
Cancel

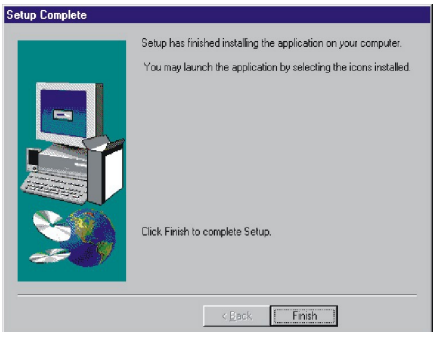
8. You will be brought to the **Select Program Folder** page. A default folder (**BDE 4**) will have already been established for you. Click the **Next>** button.


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folders:
BDE4
Existing Folders:
Accessories
Internet Explorer
LNv5_11_2
Startup
< Back
Next >
Cancel

9. You will be brought to the **Start Copying Files** page, which will specify your **Current Settings** that you have established in the previous pages. Click the **Next>** button.


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Setup Type:
Complete
Target Folder
C:\Program Files\PCSC\BDE4
User Information
Name: TEC
Company: TEC
< Back
Next >
Cancel

10. The **BDE** files will now decompress onto your hard drive. When the decompression is finished, you will be brought to the **Setup Complete** page. Click the **Finish** button.

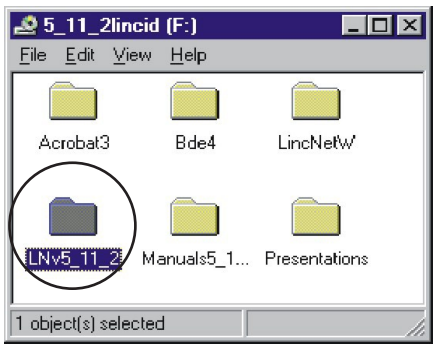

Setup Complete
Setup has finished installing the application on your computer.
You may launch the application by selecting the icons installed.
Click Finish to complete Setup.
< Back
Finish

11. You will be brought back to your Windows“ desktop. Return to the **5.11.2 CD ROM** window. You are now ready to install the **5.11.2** program.

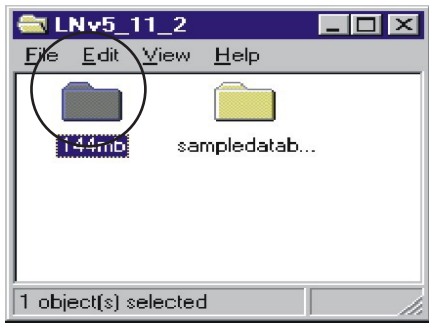
Installing 5.11.2

NOTE Installing the 5.11.2 program files is very similar to installing the BDE-4 program files.

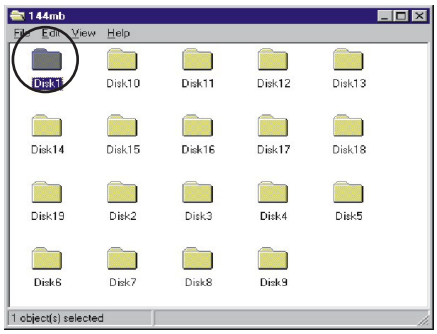
1. In the **5.11.2 CD ROM** window, double-click on the **LNv 5.11.2** folder.



2. In the **LNv 5.11.2** window, double-click on the **144mb** folder.

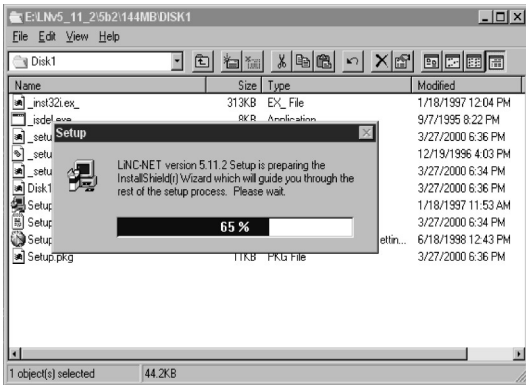


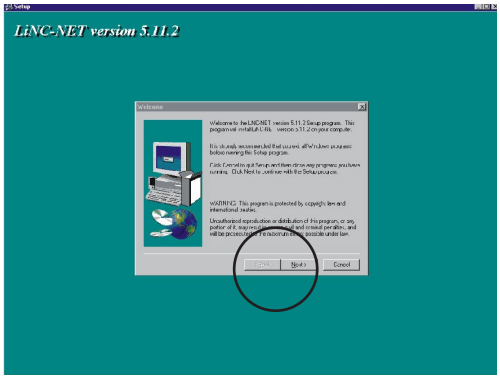
3. In the **144mb** window, double-click on the **Disk 1** of 19 folders.



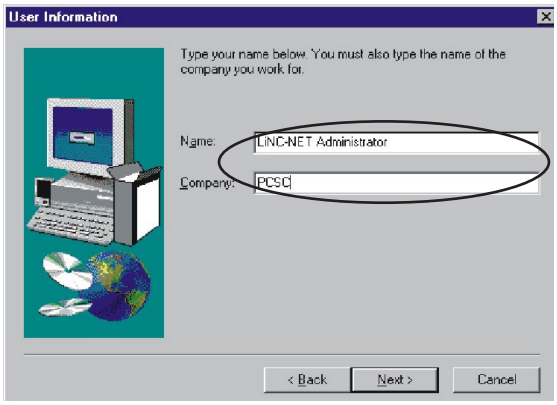
4. **In the** Disk 1 window, double-click on the **Setup.exe** application.

5. This will bring you to the **Install Shield Wizard**“, which will lead you through the rest of the **5.11.2** installation. The initial page will be the **Welcome** page, which will state that you will be installing **5.11.2** on your hard drive. Click the **Next>** button.

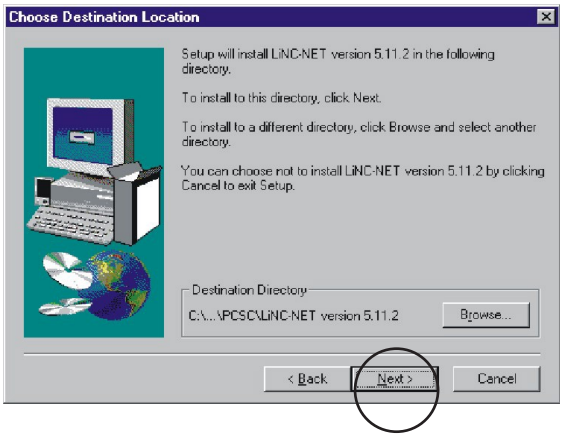




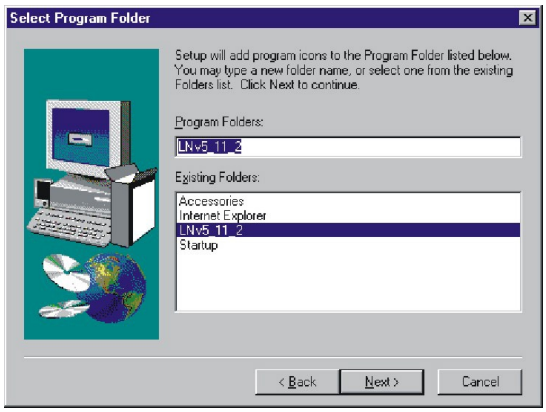
6. You will then be brought to the **User Information** page. Type in your **Name** and **Company** in the appropriate spaces. Click the **Next>** button.



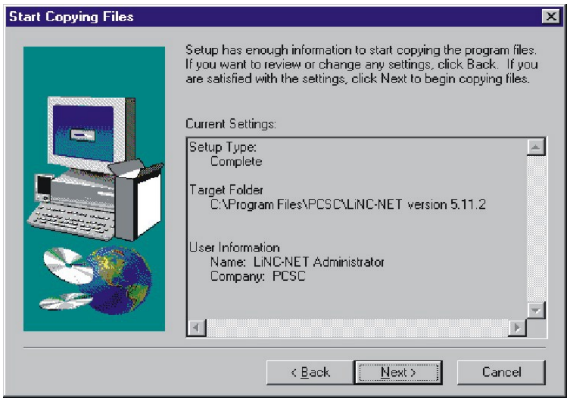
7. You will be brought to the **Destination Location** page. A default directory (C:\Program\ Files\PCSC\LiNC-NET version 5.11.2) will have already been established for you. Click the Next> button.


Choose Destination Location
Setup will install LiNC-NET version 5.11.2 in the following directory.
To install to this directory, click Next.
To install to a different directory, click Browse and select another directory.
You can choose not to install LiNC-NET version 5.11.2 by clicking Cancel to exit Setup.
Destination Directory
C:\...\PCSC\LiNC-NET version 5.11.2
Browse...
< Back
Next >
Cancel

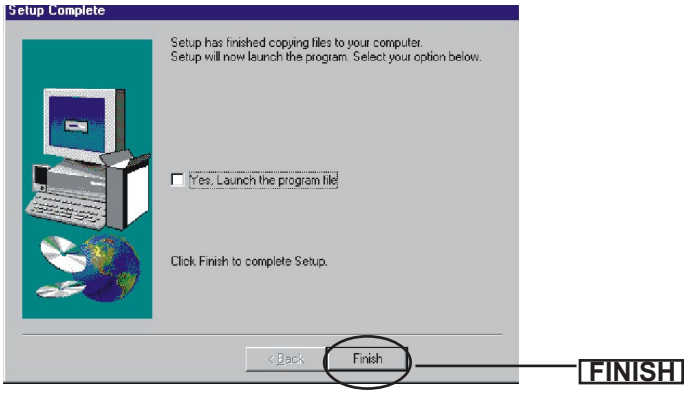
8. You will be brought to the **Select Program Folder** page. A default folder **LNv5.11.2** will have already been established for you. Click the **Next** button.


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folders:
LNv5_11_2
Existing Folders:
Accessories
Internet Explorer
LNv5_11_2
Startup
< Back
Next >
Cancel

9. You will be brought to the **Start Copying Files** page, which will specify your **Current Settings** that you have established in the previous pages. Click the **Next>** button.


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Setup Type:
Complete
Target Folder
C:\Program Files\PCSC\LINC-NET version 5.11.2
User Information
Name: LINC-NET Administrator
Company: PCSC
< Back
Next >
Cancel

10. The **5.11.2** files will now decompress onto your hard drive. A **5.11.2** window will come up briefly, showing the LiNC-NET icons that are being installed. When the decompression is finished, you will be brought to the **Setup Complet**e page. In the page will be a box stating:


Setup Complete
Setup has finished copying files to your computer.
Setup will now launch the program. Select your option below.
Yes, Launch the program file
Click Finish to complete Setup.
< Back
Finish
FINISH

You have two choices:

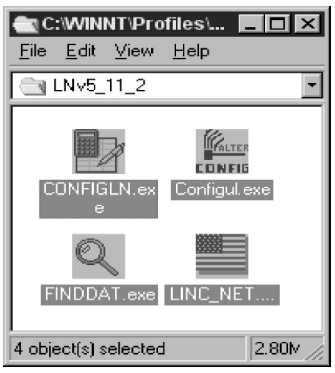
-**(Recommended)** Click the **Finish** button *without checking* the ☐**Yes, Launch the program files**. This will return you to the Windows desktop.

-*Check* the ☐**Yes, Launch the program files** then click the **Finish** button. This will immediately launch **ConFigLN** so that you can complete your installation.

NOTE It is recommended that you do not select the☐ **Yes, Launch the program files**.

11. Click on the **Finish** button. You will be brought back to your Windows desktop.

12. On the desktop, you will see an open window with icons for different LiNC-NET utilities. These can be placed on the desktop to as shortcuts to the different programs.



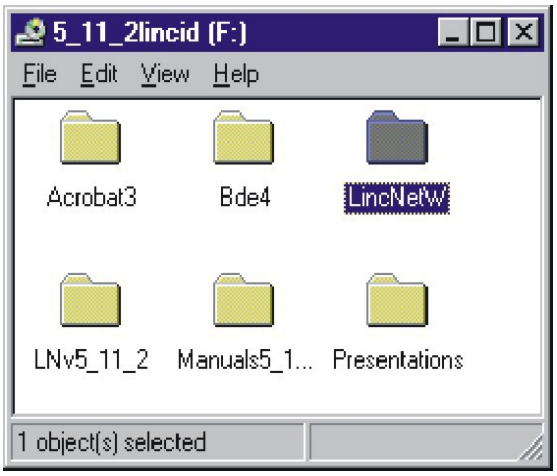
One can also access the different LiNC-NET programs through the **Start** menu, in **Programs under LNv 5.11.2 folder**.

At this point, you are ready to start Step 3.

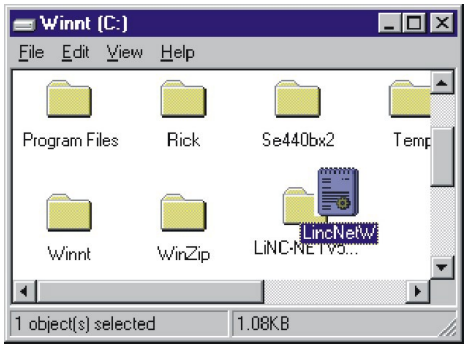
Step 3- Copy Lincnet W.ini to the LNv5.11.2 Program Folder

Copy Lincnet W.ini to the LNv 5.11.2 Program Folder

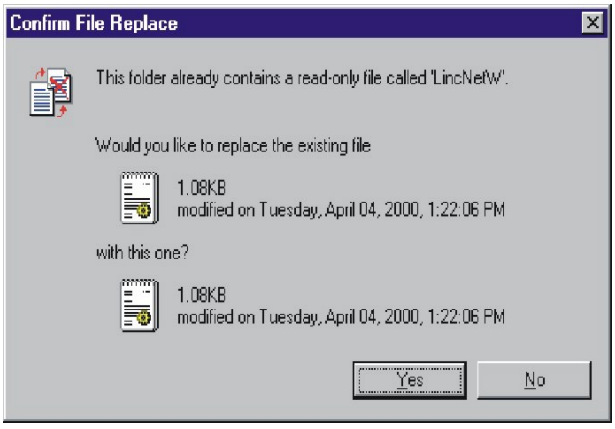
1. In the 5.11.2 CD ROM Window, double-click on the LincNetW folder.



2. In the LincNetW.ini window, copy the LincNetW.ini file and paste it intothe 5.11.2 program folder, C:\Program Files\Pcsc\LiNC-NET version 5.11.2 (default path).

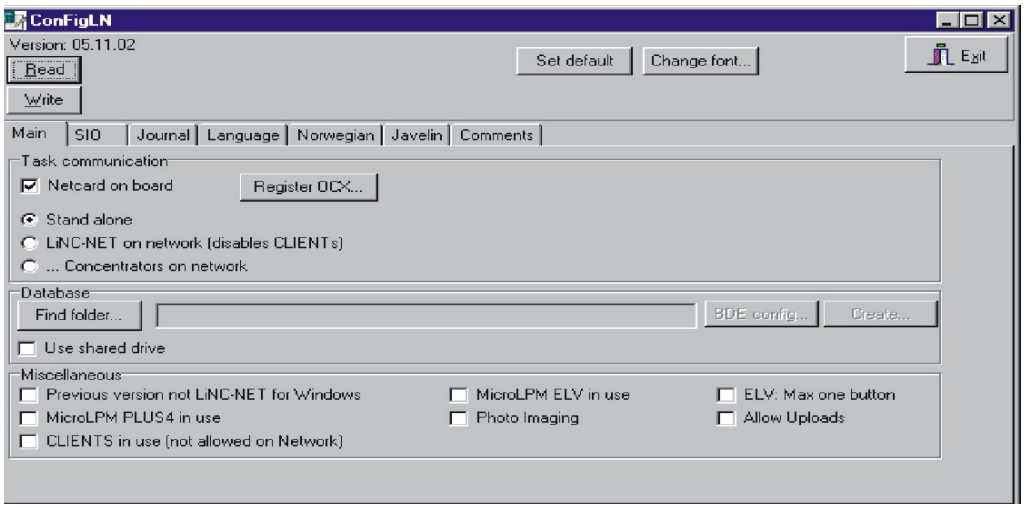


3. Confirm that you are replacing the file by answering yes.


Confirm File Replace
This folder already contains a read-only file called 'LincNetW'.
Would you like to replace the existing file
1.08KB
modified on Tuesday, April 04, 2000, 1:22:06 PM
with this one?
1.08KB
modified on Tuesday, April 04, 2000, 1:22:06 PM
Yes
No

4. Go to Start\Programs\LNv5.11.2\ConfigLN.
   a. Select the Set defaults. This will give you the proper LincnetW.ini.file that you purchased.
   b. Save by clicking on the Write tab. Selecting the Write tab will add a duplicate file called LincnetW.ini in your WINNT folder.

NOTE Facility code for site will be implemented into the WINNT\ LincnetW.ini site code string. LiNC-ID will be implemented if purchased for the system.



Step 4- Using ConfigLN to Install a Directory

ConfigLN- (Configure LiNC-NET) is a feature that is used to set options such as the location of the LiNC-NET data base (on a local hard drive or mapped to a shared network drive) and to install the default features of the LiNC-NET system.

Choose one of the following installation procedures:

· Installing LiNC-NET for a Standalone System
· Installing LiNC-NET for a Multi-User Host Configuration
· Installing LiNC-NET for a Multi-User Concentrator Configuration
· Installing LiNC-NET for a Multi-User Workstation Configuration

A Brief Word about Stallions®

Stallions® In order to increase the number of panels that can be accessed through a Host in a Standalone system or a Concentrator in Multi-User system, eight additional com ports may be added through the use of an external stallion.

A Host or Concentrator PC may function using two external Stallions®. However, LiNC-NET 5.11.2 software limits each Concentrator to a maximum of 13 COM ports.

The use of Stallions® is now possible in LiNC-NET 5.11.2 for either a Host in a Standalone system (allowing an interface of up to 200 panels in one system) or through the use of concentrators (allowing an interface of up to 4,000 panels in one system).

Though LiNC-NET will function using Stallions®, the installation and configuration of Stallions® to a site are beyond the focus of this manual. An explanation of Stallion® installation and configuration can be found in PCSC Technical Bulletin 39-10060-001(Stallion® Easy Connection Dual Interface Module).

Installing LiNC-NET for a Standalone System

1. Go to **Start\Programs\LNv5.11.2** and click on **ConFigLN**.

The default value in the **Task Communication** shows a stand-alone computer equipped with a network card. This means that the computer will be able to connect to the panel through the network (LAN, WAN), direct cable (RS232 / RS485) or remote access (modem).

Network Card- A Network Interface Card (NIC) is an Ethernet communication hardware device inserted in a computer allowing it to communicate with a local area network (LAN). An Ethernet is a network architecture that accommodates communications at 10 megabytes/100 megabytes per second between PC's over a BUS topology

2. If you are using a network card with your system, click on **Netcard on Board** in the **Task Communication** section.

NOTE If the computer isn't equipped with a network card or you will not use a LAN connection in your LiNC-NET operations, do NOT check **Netcard on Board.**

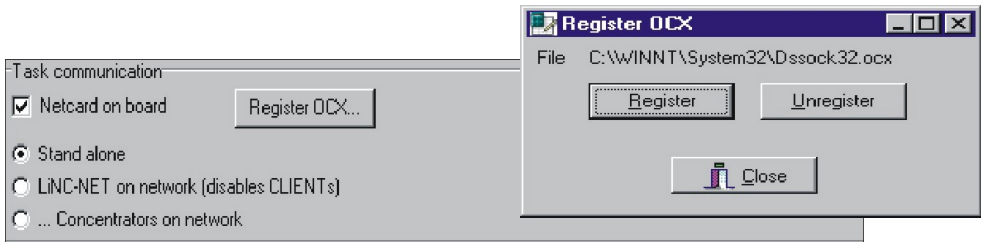
A computer without a Network Card will connect to a panel only with a direct cable (RS232 / RS485) or with a remote connection (modem).

3. As soon as the configuration desired is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

If you are using a Network Card in your LiNC-NET System-

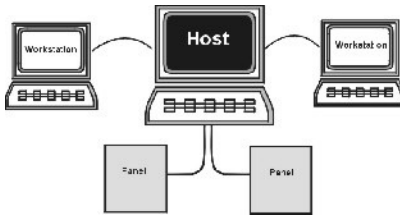
During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. reregister) Dssock32.ocx through ConFigLN.

1. Make sure Netcard on Board button is checked.
2. Click on Register OCX...
3. In the Register OCX window, click on Register.
4. Another pop-up window will appear saying OCX is registered.
5. Click OK.
6. Click Close to register OCX.
7. Click once on the Write button located in the top left side of the screen.



NOTE It is not necessary to **Unregister** Dssock32.ocx in the installation process.

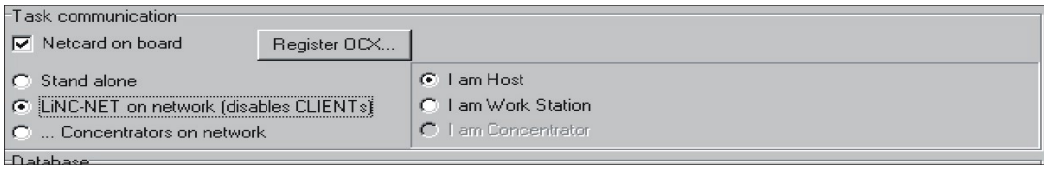
Installing LiNC-NET for Multi-User Host Configuration



Host is the computer that will manage the database, display the information and monitor alarms associated with each workstation that it is connected to it.

NOTE Before installing LiNC-NET- v. 5.11.2 on the Host PC or Workstation PC, you must configure all computers to communicate to each other through the network using TCP/IP as the main protocol.

1. Go to **Start\Programs\LNv5.11.2** and click on **ConFigLN**.
2. In the **Task Communication** section, be sure that the **Netcard on Board** is checked.



3. Click on **LiNC-NET on Network** (disables CLIENTs) option and the computer will default to the **I am Host** selection.

NOTE I am Host must be selected if the computer is the Host for LiNC-NET v. 5.11.2. All panels are connected to the Host PC in this configuration.

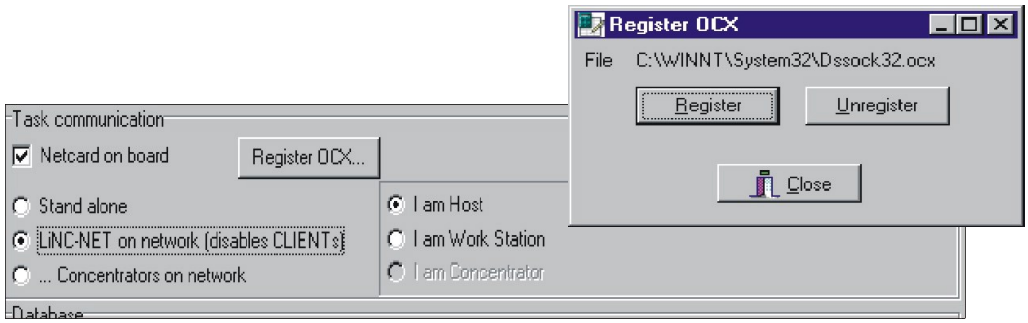
4. As soon as the configuration desired is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

The Panels receive the date and time from the Host PC in this configuration-except the modem panels.

If you are using a Network Card in your LiNC-NET System-

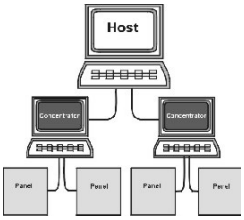
During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. reregister) Dssock32.ocx through ConFigLN.

1. Make sure **Netcard on Board** button is checked.
2. Click on the **Register OCX..**.
3. In the **Register OCX** window, click on **Register**.
4. Another pop-up window will appear saying **OCX is registered**.
5. Click **OK**.
6. Click **Close** to register OCX.
7. Click once on the **Write** button located in the top left side of the screen.



NOTE It is not necessary to **Unregister** Dssock32.ocx in the installation process.

Installing LiNC-NET for a Multi-User Concentrator Configuration



Concentrator- A special application of a PC that is not the Host or one of the **Workstations.** A concentrator operates as a router by LiNC-NET to function as an interface between the Host PC and (up to) 200 panels. LiNC-NET 5.11.2 will support up to 20 concentrators in one system, permitting a Host to monitor up to 4000 panels!

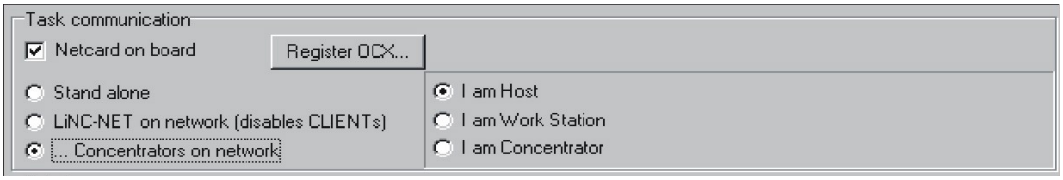
If your LiNC-NET system includes **Concentrators**, the **Host** is not able to connect directly to the system panels. All panels have to be connected through the Concentrators.

Concentrators will often operate in a system with Workstation PCs. However, at this time, LiNC-NET 5.11.2 does not allow Concentrators to function as Workstations.

Panels receive their date and time from each concentrator PC-except modem panels.

Using a Concentrator System

1. Go to **Start\Programs\5.11.2** and click on **ConFigLN**.
2. In the **Task Communication** section, be sure that the **Netcard on Board** is checked.
3. Click on **LiNC-NET on Network (disables CLIENTs**) option and the computer will be set, per default, as a Host in a multi-user environment **(I am Host** selected).
4. Select the **I am Concentrator** option.
5. In **Local PC Number** scroll menu, choose a number between **1** and **20**. This number must be unique for each concentrator (PC) installed in the multi-user environment. The example below indicates 5 as the Local PC Number.



6. In the **Host PC** name window, type the Host computer name (check in **Control Panel\Setting\ Network\Identification** tab in the Host computer, if needed). The example above uses HOST as the HOST PC name.

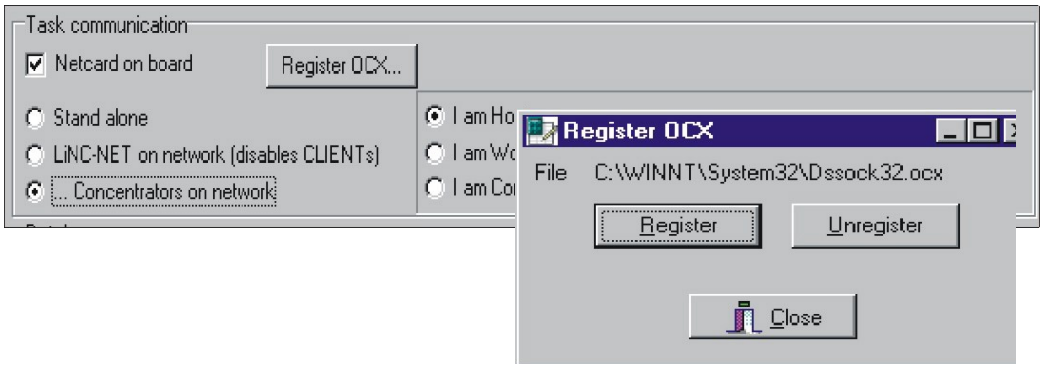
NOTE If the computer is a Concentrator, I am Concentrator must be selected. Each concentrator must be assigned a unique Local PC number (from 1 to 20) and the Host computer name that the concentrator is connected.

1. As soon as the configuration desired is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

If you are using a Network Card in your LiNC-NET system-

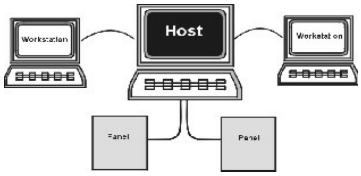
During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. reregister) Dssock32.ocx through ConFigLN.

1. Make sure **Netcard on Board** button is checked.
2. Click on **Register OCX...**
3. In the **Register OCX** window, click on **Register**.
4. Another pop-up window will appear saying **OCX is registered**.
5. Click **OK**.
6. Click **Close** to register OCX
7. Click once on the **Write** button located in the top left side of the screen.



NOTE It is not necessary to Unregister Dssock32.ocx in the installation process.

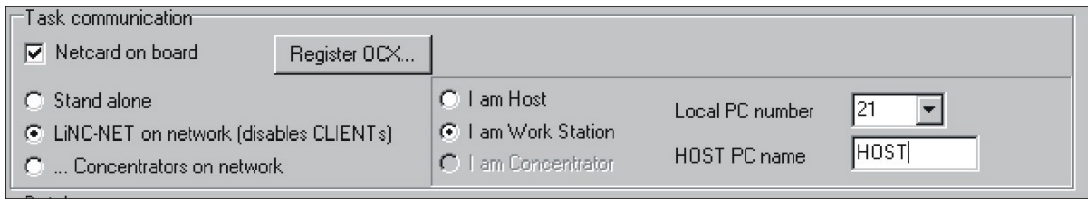
Installing LiNC-NET for a Multi-User Workstation



Workstation Up to 10 PC's may function as a workstation by communicating in a **Peer to Peer** method (equal ability to perform the same job at any PC in the local area network). Workstations do not store data, nor do they communicate directly with the panels. The **Host** PC in a LiNC-NET system stores all data on its hard disk drive and also communicates to the panels.

NOTE Before installing LiNC-NET for Windows-NT, version 5.11.2 the Host PC or Workstation PC, you must configure all computers to communicate to each other through the network using TCP/IP as the main protocol. The person who will set the **ConFigLN** program must have a user account set in the **Host Windows NT** 4.0 computer in order to create a share drive with this computer. This user account must have the right to connect remotely to the **Host** computer. See **Create a User Account** section for further information

1. Go to **Start\Programs\LNv5.11.2** on **ConFigLN**.
2. In the **Task Communication** section, be sure that the **Netcard on Board** is checked.
3. Click on the **LiNC-NET on network (disables CLIENTs)** option and the computer will be set, per default, as a Host in a multi-user environment (**I am Host** selected).
4. Select the **I am Workstation** option.
5. In the **local PC number** scroll menu, choose a number between **21** and **30**. This number must be unique for each workstation (PC) installed in the multi-user environment. The number for the first workstation used in the example is 21.
6. In the **Host PC Name** window, type the **Host** computer name (check in the **Control Panel\ Setting\Network\Identification** tabof the **Host** computer, if needed). In the example, the HOST PC name is HOST.



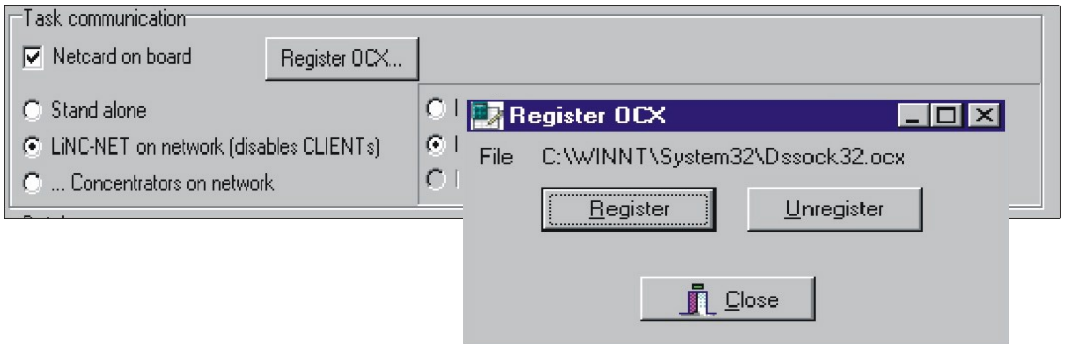
NOTE If the computer is a workstation, **I am Workstation** must be selected. Each workstation must be assigned a unique Local PC number (from **21** to **30**) and the **Host** computer name that the workstation is connected.

1. As soon as the configuration desired is set in the **Task Communication** section, save it by clicking once on the **Write** button located in the top left side of the screen.

If you are using a Network Card in your LiNC-NET System-

During the installation of LiNC-NET on your computer, Dssock32.ocx is registered to enable the communication of LiNC-NET network applications. In the event of changes to your system or your computer, you are given the option to Register (i.e. reregister) Dssock32.ocx through ConFigLN.

1. Make sure **Netcard on Board** button is checked.
2. Click on **Register OCX...**
3. In the **Register OCX** window, click on **Registe**r.
4. Another pop-up window will appear saying **OCX is registered**.
5. Click **OK**.
6. Click **Close** to register OCX.
7. Click once on the **Write** button located in the top left side of the screen.



NOTE It is not necessary to **Unregister** Dssock32.ocx in the installation process.

Step 5- Using ConFigLN to Create a Database

This section allows the user to:

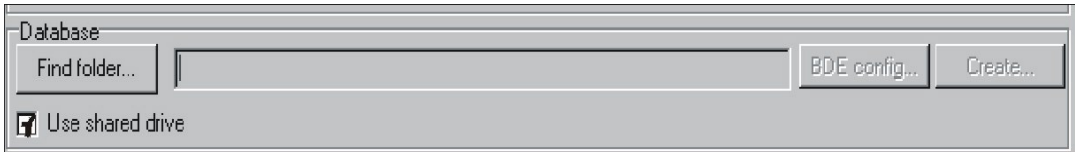
- Find or create a folder where the LiNC-NET database will be located.
- Optional: Using a shared drive in a Multi-User system (Host/Workstation/Concentrator).
- Configure the parameters needed in the Borland database (BDE).
- Create the database of LiNC-NET for Windows V 5.11.2
- Set your Default Values

Part 1- Creating the LiNC-NET Database Folder

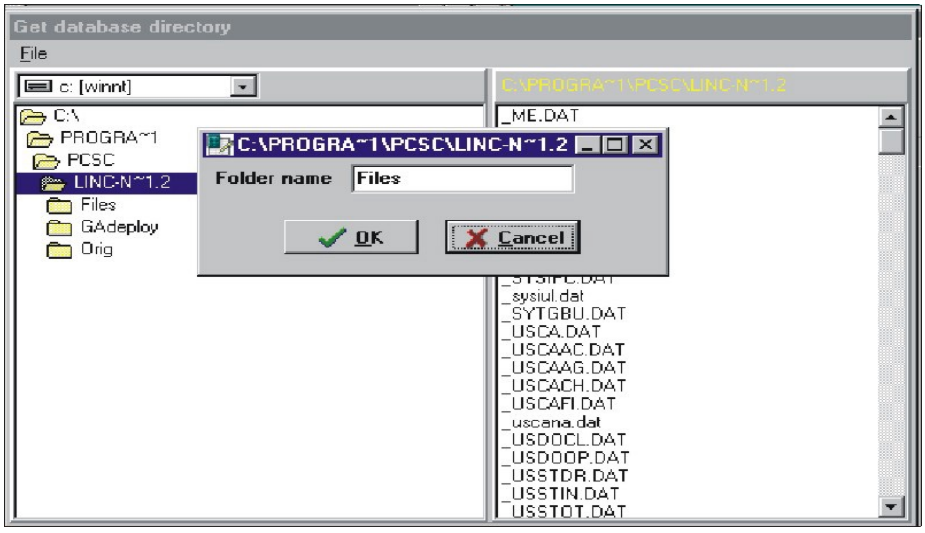
The default setting for the database folder is set to point to the **c:\LNv5.11.2** Files folder (see screen below).

If you need to change this setting (choosing another folder or creating a new one) follow the procedure below:

1. Go to **Start\Programs\LNv5.11.2** and click on **ConFigLN**
2. In the **Data-Base** section, click on the **Find folder...** button. This will open the **Get Data Base Directory** window (below).



3. In the Get Data Base Directory window, select the appropriate drive and/or folder, click on **File\New**, and select Folder.
4. In the window, type in a name for your database folder (e.g. **Files**)
5. Click on the **OK** button to establish your new folder.



6. Click on **File** and select **OK** to return to the **ConFigLN** menu. The **Data Base** section will now reflect **C:\ProgramFiles\PCSC\LiNC-NET version 5.11.2\Files.**
7. Click on the **Write** button in the top left side of the screen to save the new setting.

Option: Using a Shared Mapped Network Drive in a Multi-user System (Host/Workstation/Concentrator)

This option allows you to map a drive (assign a letter to the folder and authorize any workstation to see and access this folder like a physical drive). This option is specifically used in a multi-user environment.

If you are using a LINC-NET system with concentrators, you will also need to share a drive

NOTE When you select a share drive, the Find folder... is not used. The database can be mapped to a drive anywhere in the network where sufficient disk space can be allocated.

Sharing a Folder

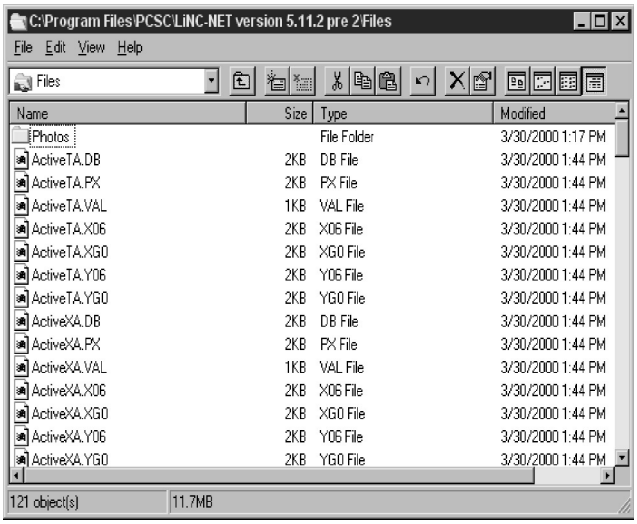
1. Check on the **Use Shared Drive** square. This will create a **Share Drive...** button.

2. Click on the **Share Drive...** button to see the contents of the folder.

3. If the content of the folder isn't displayed in a full screen, click the square middle button on the right top of the window menu so that it may enlarge to full-screen.

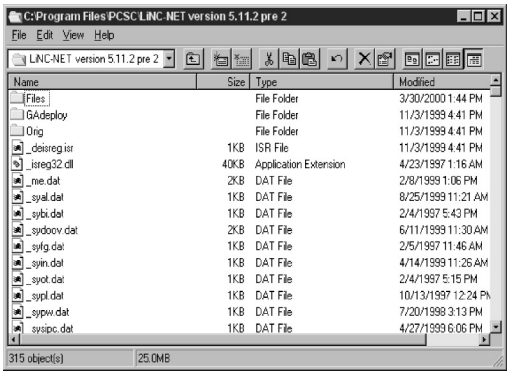
4. Go to **View** and click on **Toolbar.**

5. Click on the **Up One Level** icon to go one level up in the directory.

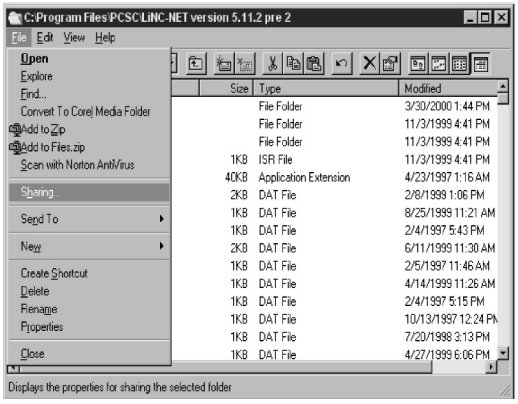

C:\Program Files\PCSC\LiNC-NET version 5.11.2 pre 2\Files
File Edit View Help
Files
Name Size Type Modified
Photos File Folder 3/30/2000 1:17 PM
ActiveTA.DB 2KB DB File 3/30/2000 1:44 PM
ActiveTA.PX 2KB PX File 3/30/2000 1:44 PM
ActiveTA.VAL 1KB VAL File 3/30/2000 1:44 PM
ActiveTA.X06 2KB X06 File 3/30/2000 1:44 PM
ActiveTA.XG0 2KB XG0 File 3/30/2000 1:44 PM
ActiveTA.Y06 2KB Y06 File 3/30/2000 1:44 PM
ActiveTA.YG0 2KB YG0 File 3/30/2000 1:44 PM
ActiveXA.DB 2KB DB File 3/30/2000 1:44 PM
ActiveXA.PX 2KB PX File 3/30/2000 1:44 PM
ActiveXA.VAL 1KB VAL File 3/30/2000 1:44 PM
ActiveXA.X06 2KB X06 File 3/30/2000 1:44 PM
ActiveXA.XG0 2KB XG0 File 3/30/2000 1:44 PM
ActiveXA.Y06 2KB Y06 File 3/30/2000 1:44 PM
ActiveXA.YG0 2KB YG0 File 3/30/2000 1:44 PM
121 object(s) 11.7MB

6. Click on the folder name that has been chosen during the **Step 5: Part 1** configuration (in this case, Files).

7. Right-Click on the folder to select (highlight) it

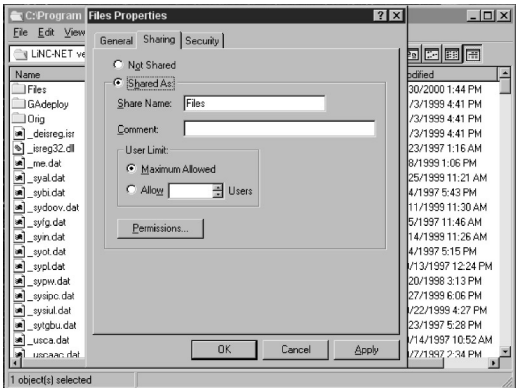

C:\Program Files\PCSC\LiNC-NET version 5.11.2 pre 2
File Edit View Help
LiNC-NET version 5.11.2 pre 2
Name Size Type Modified
Files File Folder 3/30/2000 1:44 PM
GAdeploy File Folder 11/3/1999 4:41 PM
Orig File Folder 11/3/1999 4:41 PM
_deisreg.isr 1KB ISR File 11/3/1999 4:41 PM
_isreg32.dll 40KB Application Extension 4/23/1997 1:16 AM
_me.dat 2KB DAT File 2/8/1999 1:06 PM
_syal.dat 1KB DAT File 8/25/1999 11:21 AM
_sybi.dat 1KB DAT File 2/4/1997 5:43 PM
_sydoov.dat 2KB DAT File 6/11/1999 11:30 AM
_syfg.dat 1KB DAT File 2/5/1997 11:46 AM
_syin.dat 1KB DAT File 4/14/1999 11:26 AM
_syot.dat 1KB DAT File 2/4/1997 5:15 PM
_sypl.dat 1KB DAT File 10/13/1997 12:24 PM
_sypw.dat 1KB DAT File 7/20/1998 3:13 PM
_sysipc.dat 1KB DAT File 4/27/1999 6:06 PM
315 object(s) 25.0MB

8. Go to the **File** option (located on the Title bar) and click on **Sharing**.

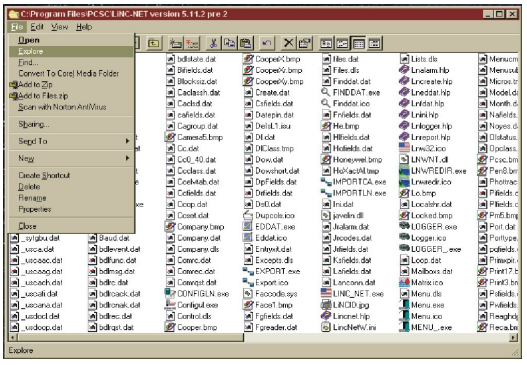


9. In the **Sharing** tab select the **Share As** option. The name of the folder will appear in the **Share Name** windows. Type in your selected file in the **Share Name** (in this case **Files**)
10. Click on the Maximum Allowed button within the User Limit section.

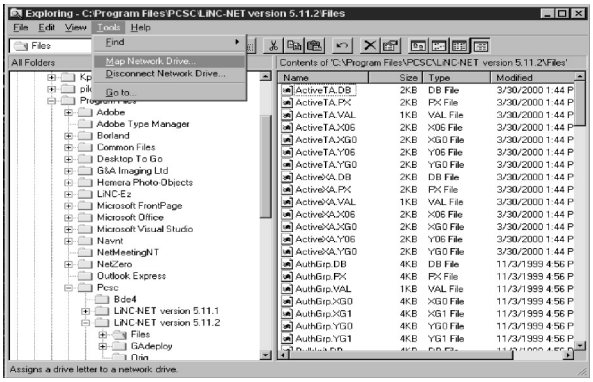
11. Click on **Apply** to confirm the share and **OK** to exit from the sharing window.



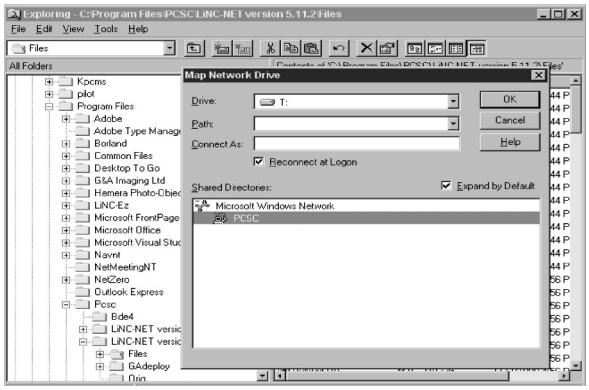
12. A pop-up folder illustrating the contents of the LiNC-NET 5.11.2 folder will appear. In the folder window, go to **File** and click on **Explore**.



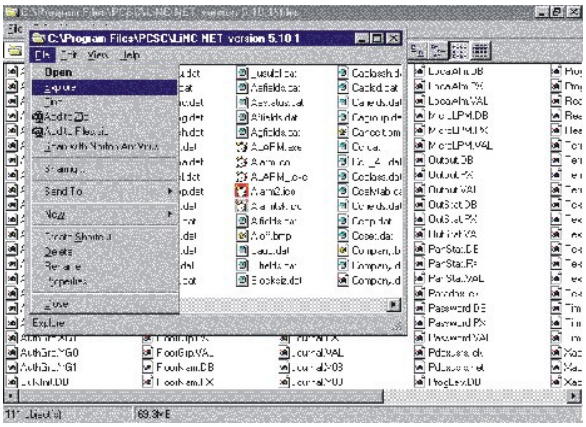
13. Windows Explorer will appear. Click on **Tools** and choose **Map Network Drive.**



14. The **Map Network Drive** menu illustrates that the shared drive has been chosen to be **T**. And that it is located on the PC named HOST. The Files folder contains the information (LiNC-NET data files) that will be map\shared.



15. Click on the **Close** button and the **Map Network Drive** menu closes (as do all of the pop-up boxes) and the create database menu appears. Notice that the previously selected **Shared Drive** and **Path** are now displayed within the **Use Share Drive** window.



16. Click on the Write button to record the designated **Share Drive** information to the PC's hard disk drive.

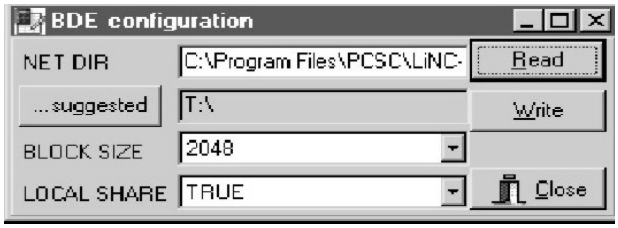
Example If **LnwFiles5.11.2** was the folder created and shared, the mapping with the letter "T" should be like the screen below.

Part 2 - Configuring the Borland Database Engine (BDE)

This option is used to set the Borland Paradox database; the DBMS (Database Management System) needed to run LiNC-NET for Windows.

1. Click on the **BDE config...** button. The screen shown below will appear.

2. The NET DIR window displays the drive letter found in the BDEAdmin file. If this drive letter is different from the one set in **Mapping a Drive Letter for the Folder** section or in the Database Find folder field (if sharing isn't employed), the **...suggested** button with the suggested drive letter will appear.



3. The **NET DIR** window must show the same drive letter set in **Use Shared Drive** or the Database Find folder field (if sharing isn't employed). Click on the **...suggested** button to change the configuration. **If not using a shared drive, set to C:\.**

4. The **BLOCK SIZE** window allows you to change the size from **2048** (default value) to **4096**.

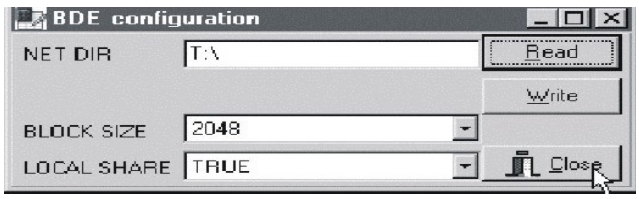
5. The **LOCAL SHARE** value must be set to **TRUE** regardless whether or NOT a shared drive is employed.

6. As soon as all the parameters have been set, click on the **Write** button to save these changes in the **BDEAdmin** file.

7. The **Read** button will read and display all settings found in the **BDEAdmin.**

8. Close the **BDE** configuration window by clicking on the **Close** button.

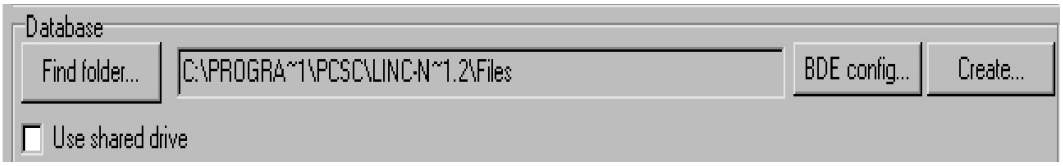
NOTE The next time the **BDE config...** is pressed, the **BDE** configuration window will display the **NET DIR**, **BLOCK SIZE** and **LOCAL SHARE** information. The **...suggested** option will not be shown because the **NET DIR** information is the same as the **Use Shared Drive** setting.



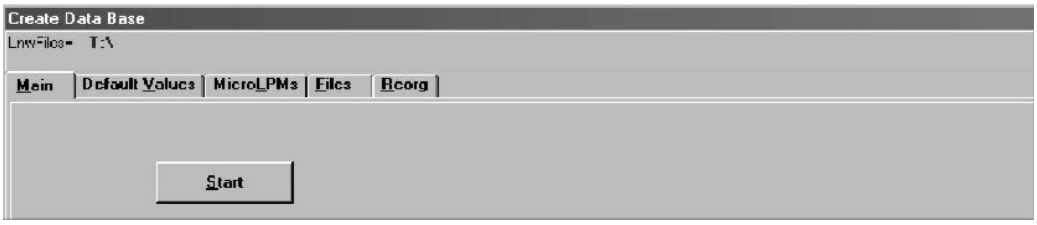
Part 3- Creating the LiNC-NET Database

Creating the database is simple. All you need to do is establish which panel you will be using with your system.

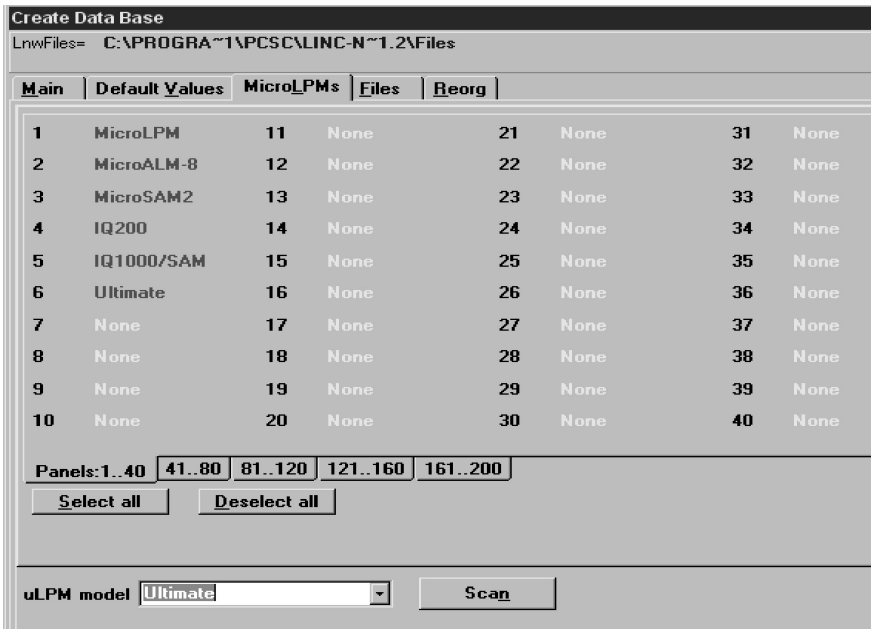
In the **ConFigLN Data Base** section,



1. Click on the **Create...** button in **ConFigLN**. The **Create Data Base** screen will appear. Notice that you are currently displaying the **Main** page.



2. Examine the 5 index tab folders. Click on the **MicroLPMs** tab. The **MicroLPM** page shall appear.



MicroLPM Selection Field

NOTE If you are using a concentrator based system, the numbering system will be different. The first digit will be based off the particular concentrator and the three final digits will be based off the number of each panel (between 1 to 200). Using this system, the first number is 1001 (Concentrator 1 on Panel 1) and the highest number is 20200 (Concentrator 20 on Panel 200)

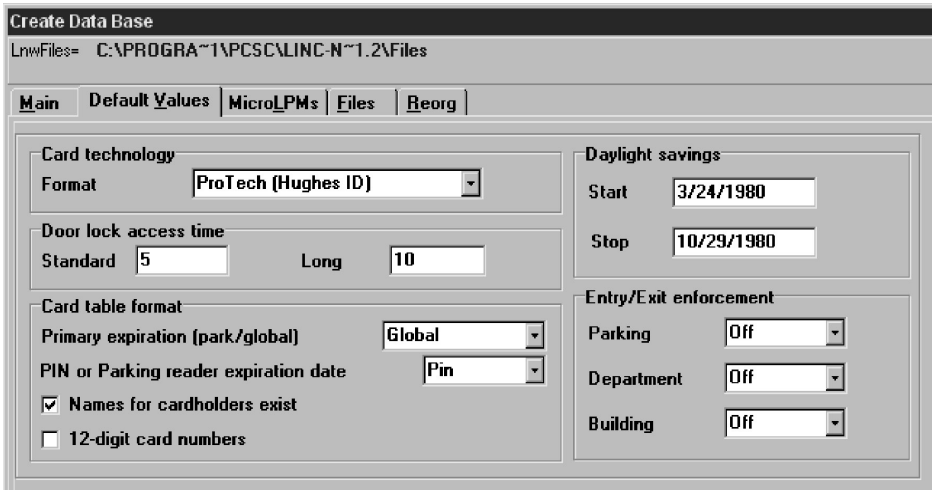
Example- Panel 122 on Concentrator 3 will be numbered 3112.

3. On the **MicroLPMs** page, select panel(s) for which data files will be created by selecting the appropriate type from the **uLPM model** window.

NOTE The **Scan** button can be used to identify the panels currently defined in the database if no panels are defined an error will be displayed. To recover click on the OK button.

4. To select panels individually, select the panel model in the radial button group box, then select the panel number.

5. When you are finished selecting panels, click on the **Default Values** tab.



At this point, you are ready to start Part 4.

Part 4- Setting Up your Data Files

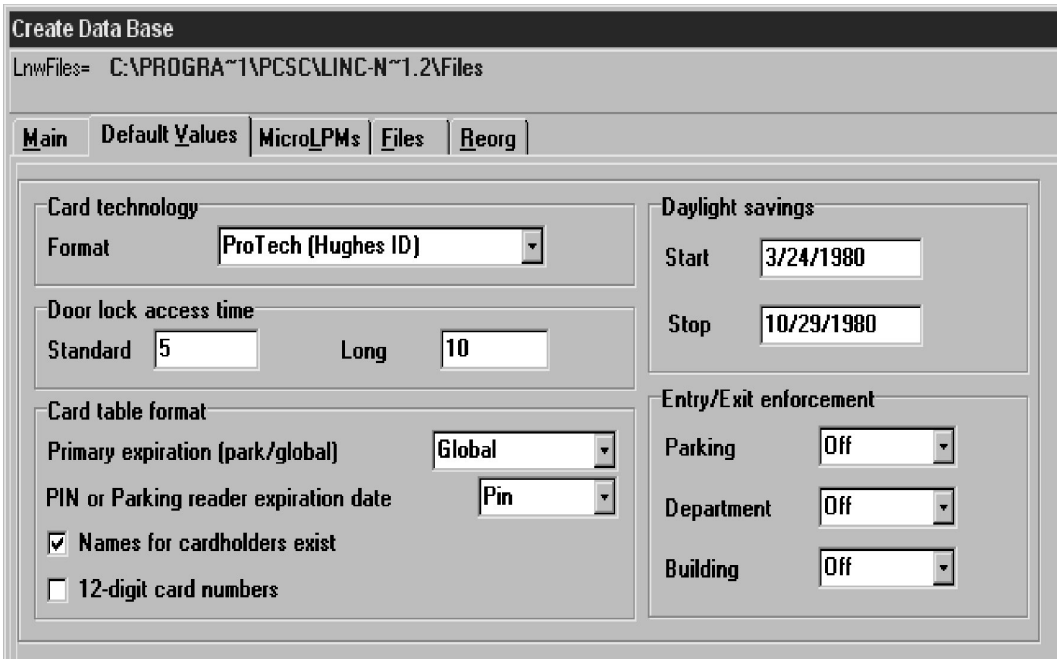
You can use **ConFigLN: Create Data Base** to set the basic characteristics of your system by making adjustments in the **Default Values** page and in the **Files** page.

Follow the steps below to create the data files:

On the **Default Values** page, select the default values for:

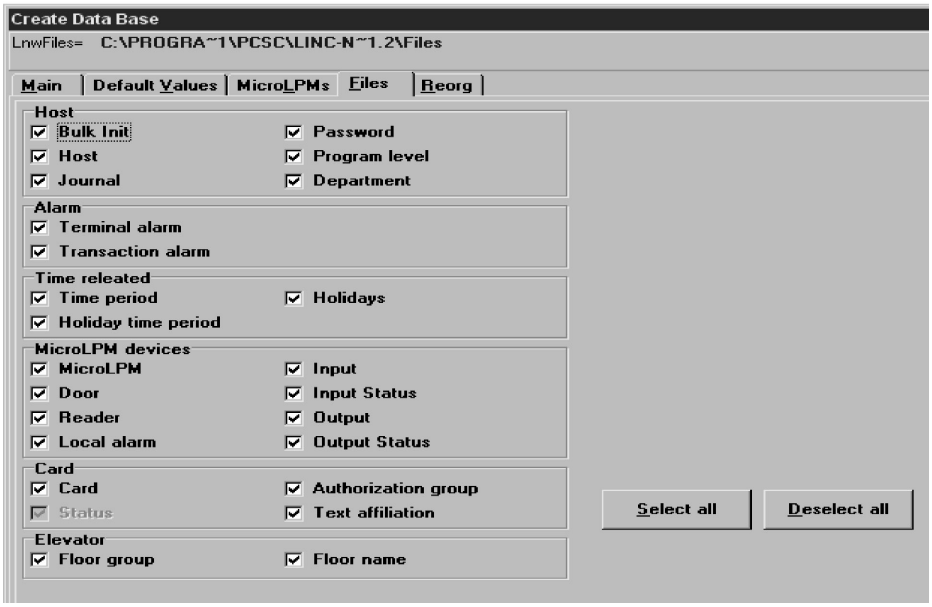
Card Technology
Door Access Time
Card Table Format
Daylight Savings Dates
Entry/Exit
Enforcement Options

Use the explanations provided in following section to help you with your **Default Values** selections



Default Values Page

On the **Files** page, confirm that the proper files (all files initially) are selected for creation.



Create Data Base: Default Values: Card Technology

In this section, you must select the card reader technology that you will implement into your access control system. Select the appropriate type of card reader in the Format window. The available card technology formats are as follows:

ProTech	BR-350, BR-351, BR-370, BR-371, All Hughes ID Proximity Readers
MagStripe	BR-450, BR-451, BR-452, BR-470, BR-471
Watermark	Any Watermark card with the 12-digit format
PCSC Wiegand	34-bit PCSC Wiegand format, All Sensor Proximity Readers
Indala	Indala Proximity format
12-digit	No site code; Magnetic Stripe
Sensor 26	Standard Sensor 26-bit format

NOTE BR-700 readers are setup as Sensor 26 Reader

FIRMWARE

Sensor 34	Standard Sensor 34-bit format
Special	Special format
PCSC 37	Special 37 bit HID Proximity format
Corp_1000	Special 35 bit HID Proximity format
Motorola 32	Special 32 bit Motorola Proximity format

A letter or additional reference description that describes the reader type can follow the card technology:

PIN-Pad	PIN Pad with the reader.
(I)	Insert Reader

Create Data Base: Default Values: Door Lock Access Time

The Door Access Time is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.

You must select time values for both the **Standard Access** and **Long Access**

Standard Access is the normal door lock energize time. Select an access time from 1-253 seconds (2-253 seconds for elevator readers).

Long Access is the door lock energize time for cardholders that require a longer access time than the standard access time(i.e. an individual with a disability). Select an access time from 2-254 seconds (3-254 seconds for elevator readers).

Create Data Base: Default Values: Card Table Format

Primary Expiration

when selected the Primary expiration date is used for all cards at all readers wired to the panel. It is irrelevant whether the readers are parking, building or department readers, as the secondary expiration date is not used.

If you select **Global**, the system uses the Primary expiration date for all types of readers. In selecting Global, the PIN feature is automatically selected (and visa versa).

If you select **Park-Only**, each cardholder has 2 card expiration dates. One date controls the access privilege for “parking” type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

PIN or Expiration Date (Parking Readers)

Park-Only when selected, the secondary expiration date is used for all cards but only at parking readers wired to the panel. The primary expiration date is then only used at department and building type readers.

If you select **Park-Only** as the primary expiration choice, you must select **Date**. If you select **PIN**, you will have the capability of user-select 4-digit PIN codes. These PIN codes are used in conjunction with a combination reader and PIN Pad.

Names for Cardholders Exist

PCSC panel products have the ability to store the cardholder names within the panel itself. Selecting this option will decrease the number of cardholders in a standard MicroLPM panel from 1016 to 600 cardholders (IQ and SIM board capacity are unaffected by downloading names). If you require names and more cardholders than 600, you will need to purchase a memory expansion kit from the MicroLPM panel.

12-Digit Card Number

Various card formats are available within the system. When using the **MagStripe** or **Watermark** format where a site code is not available, this option must be selected. For example, the MicroLPM (and I.Q. and SIM) series supports 5 - 12 digit ABA Track 2 format data.

Create Data Base: Default Values: Daylight Savings

The Daylight savings cycle may be programmed into the panel.

Start: Enter the date of the official start of Daylight Savings (In the U.S.- normally the first Sunday of April).

Stop: Enter the date of the official end of Daylight Savings (In the U.S.- normally the last Sunday of October).

NOTE If a MicroLPM panel does not roll into Daylight Savings (no Start date programmed), then it won't roll out of Daylight Savings (even if a Stop date was programmed). However, the IQ-7.9.12Q or SIM 7.9.15S series firmware allows their respective boards to rollout of Daylight Savings, even if they didn't roll into it.

Create Data Base: Default Values: Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: **Strict**, **Lenient**, and **Soft**. Each enforcement level can be individually assigned to **Parking**, **Department**, or **Building** Type readers, but is enforced only when the Entry function and the corresponding Exit function readers are on the same panel.

NOTE Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

NOTE These panel firmware versions require the door to be opened before changing the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

Standard MicroLPM-	Version 1.9.7 and above
Plus 2 MicroLPM-	Version 3.9.7 and above
Plus 4 MicroLPM-	Version 7.9.7

*All IQ and SIM panels *require* the door to be opened prior to updating the card status.

Strict Entry/Exit

The cardholder's entry/exit status must be synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is IN then Department Status can be IN or OUT.
If the cardholder's building Status is OUT, the Department Status must be OUT.
If the cardholder's Department Status is IN then Building Status must be IN.

If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a Building IN reader, the cardholder's building and department status must be OUT.

Lenient Entry/Exit

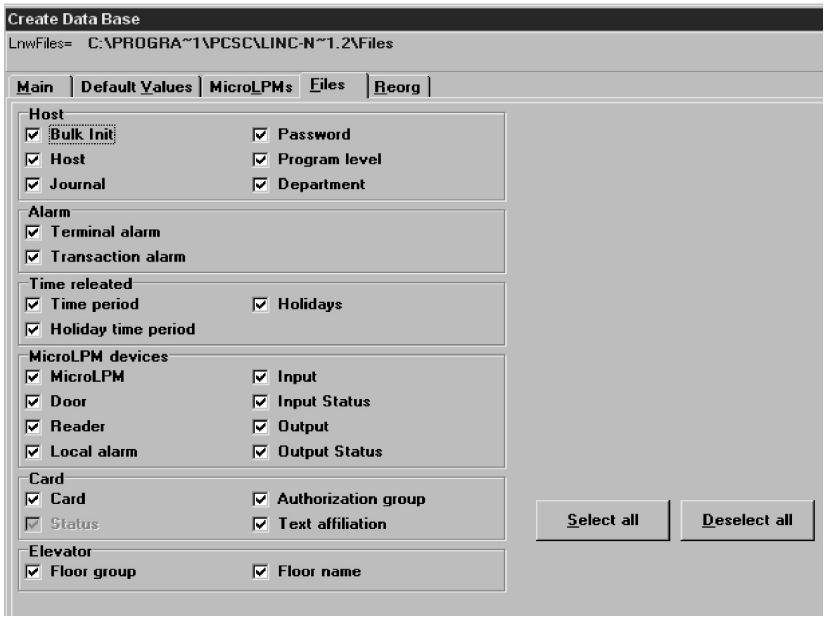
This level is the same as Strict except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

Soft Entry/Exit

This level follows the same rules as Strict except that an error transaction is recorded, all status levels are synchronized, and access is GRANTED.

Create Data Base: Files

On the Files page, select the files to be created, or press Select all.

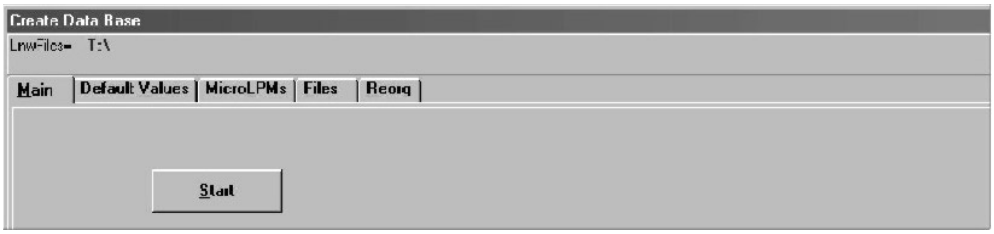


Files Page

Create Data Base: Main

When you finish making your selections-

1. On the **Main** page, click on the **Start** button to begin creating the selected files.



2. When complete, click on the **Exit** button (located in the upper right hand corner) to exit the create database module.

3. You will then return to the **ConfigLN** screen. Click on the **Exit** button located in the upper right side of the screen to return to the desktop.

You are now ready to go to Step 6.

Step 6- Configuring your Panel(s) with ConFigUL

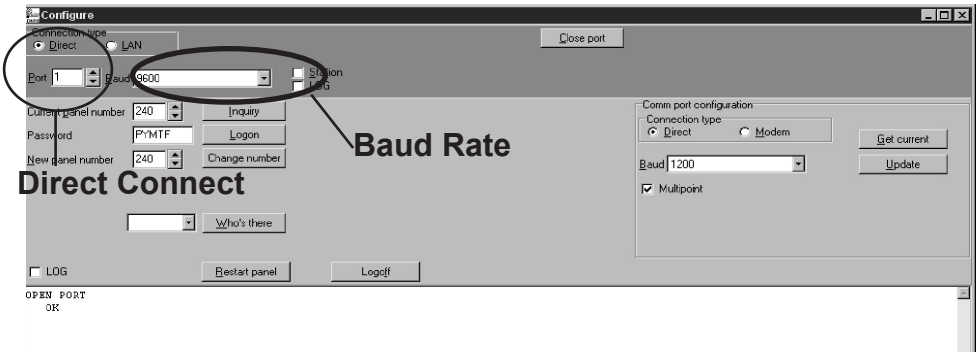
- Connecting to a Panel through a Direct Connection (RS-232 and RS-485)
- Connecting to a Panel through a LAN (Local Area Network)
- Changing a Panel's Number
- Changing the Panel's Password
- Changing the Direct Connection/MODEM Configuration
- Changing the Connection Baud Rate- MODEM/Direct
- Add/Change Panel Modem Telephone Numbers
- Logging Off from a Panel
- Exiting ConfigUL

ConFigUL

ConFigUL was created by PCSC to set options within each panel, such as the communications Baud rate, password, address and Direct Connect/ AutoDial communications method.

Connecting to a Panel through a Direct Connection

1. If the connection is **Direct Connect**, click on the **Direct** button.



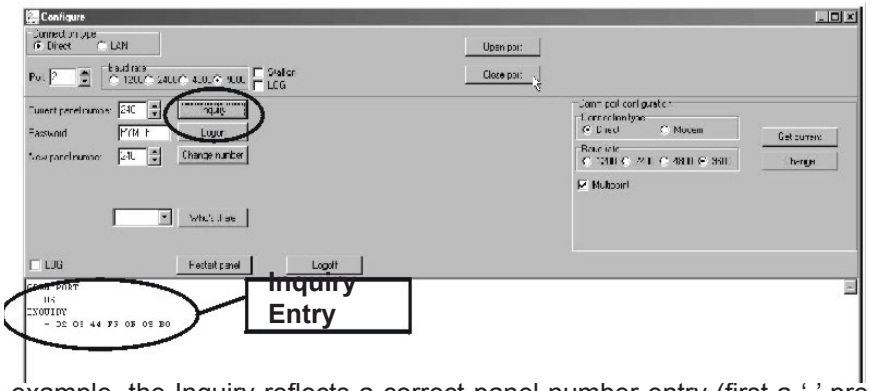
2. Enter the port number (i.e. **COM 1**, **COM 2**, **COM 3** or **COM 4**) that you are using for the Direct connection and select the Baud rate (factory default is **4800**).

3. Select the **Open Port** button. The display will expand to illustrate various configuration parameters.

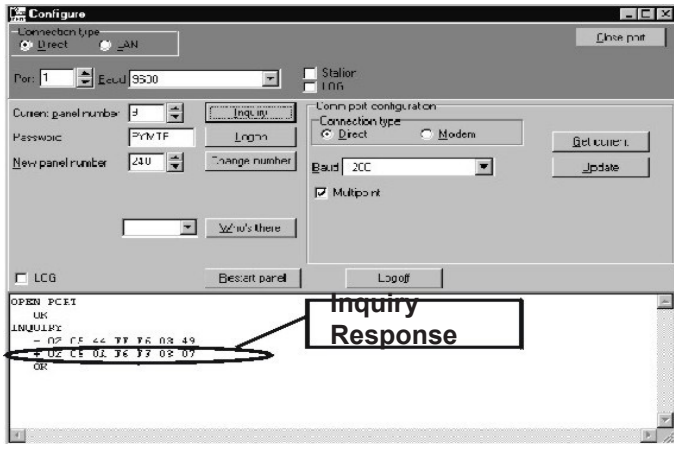
4. Check to see which Panel(s) are connected to the computer by selecting the **Whose There** button. This will send a signal to every panel connected to the system at that time and request a return signal.

5. In order to configure a panel, you must type the current number of the Panel connected to the selected port (provided that you know what it is). Type the panel number that you want to configure (1 - 200) in the "**Current Panel Number**" block.

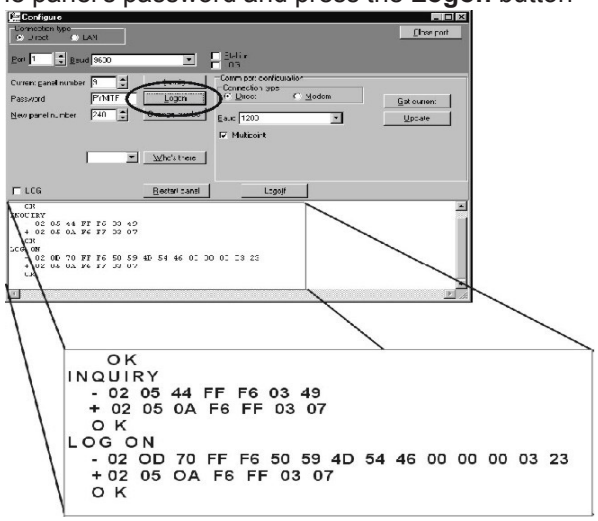
6. To confirm the number click on the Inquiry button. The system will confirm the current panel number first with a '-' prefix and display a '+' prefix if the number is correct.



In the example, the Inquiry reflects a correct panel number entry (first a '-' prefix) and confirms the correct entry (with a '+') prefix.



7. At this point, you need to type in the panel's password. All panels are shipped from factory with the default password **PYMTF** (It will be discussed later in this chapter how to change a panel's password). Type in the panel's password and press the **Logon** button

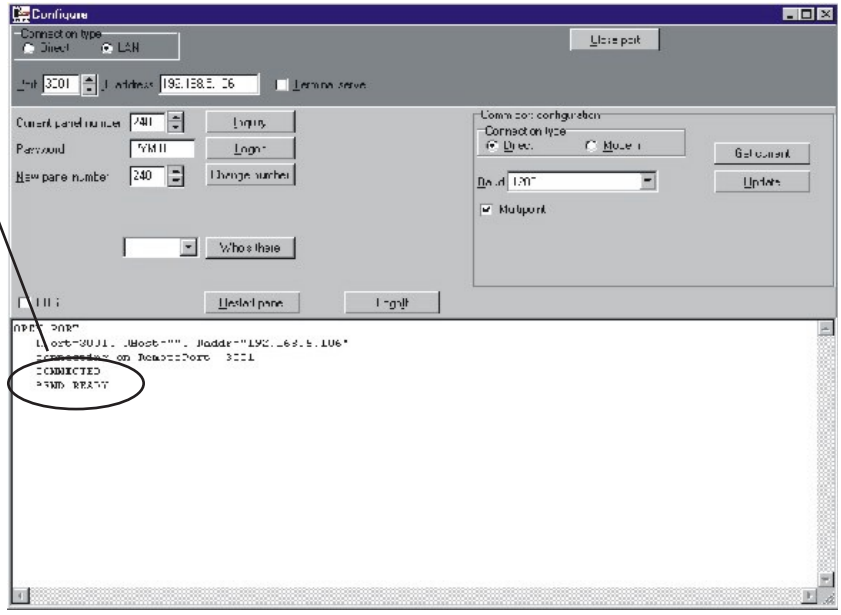


At this point the panel is ready to be configured.

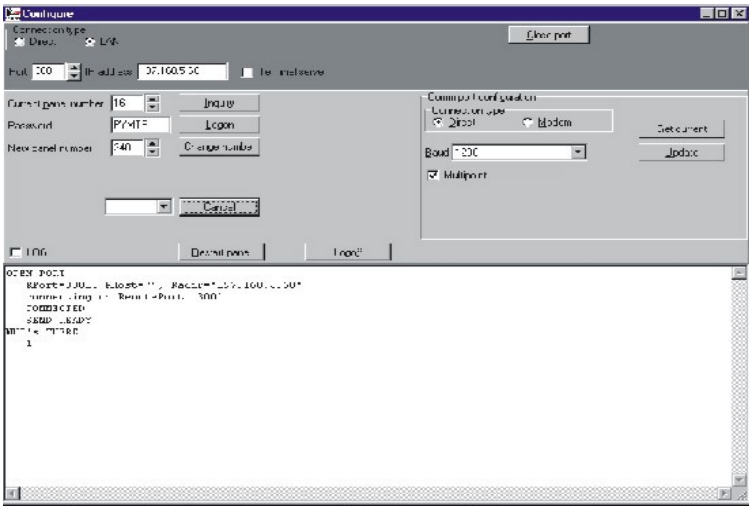
Connecting to a Panel(s) through a LAN connection

1. Click on LAN under Connection type.
2. Select the port number (2001 for Ultimate, 3001 for LANtronix or Black Box).
3. Check on Terminal serve (if you are using this kind of device) so the panel will interface the network.
4. Type the IP address (see your network administrator, if you don't know the IP address to set). Click on the Open Port button. This screen will confirm the connection by displaying the IP address, the port number, and then followed by:

CONNECTED
SEND READY



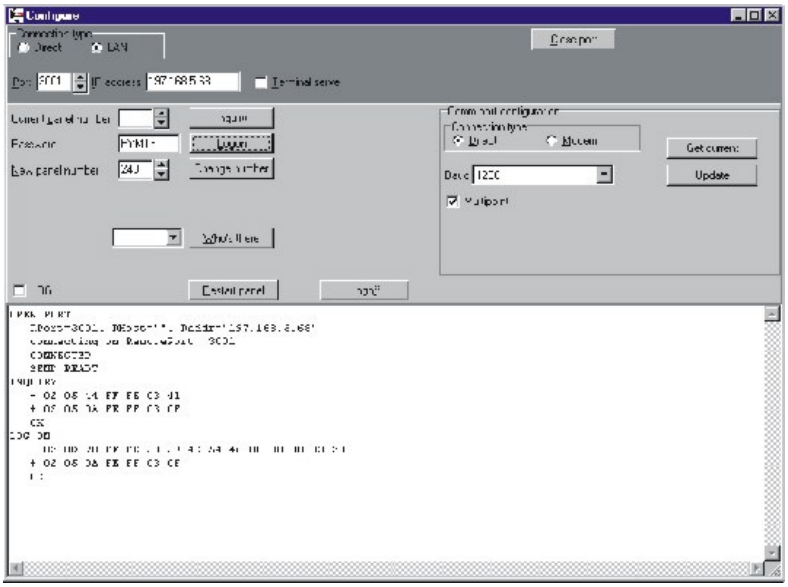
5. Check to see which panel(s) are connected to the computer by selecting the **Whose There** button. This will send a signal to every panel connected the system at that time, and request a return signal.



6. The first entry required is the current number of the panel connected to the selected port. Type the panel number that you want to connect to in the "**Current Panel Numbe**r" block.

7. To confirm the number click on the **Inquiry** button. The system will confirm the current panel number first with a '-' prefix and display a '+' prefix if the number is correct. **Inquiry** reflects a correct panel number entry (first a '-' prefix) and confirms the correct entry (with a '+' prefix).

8. At this point, you need to type in the panel's password. All panels are shipped from the factory with the default password PYMTF (It will be discussed later in this chapter how to change a panel's password). Type in the panel's password and press the Logon button.

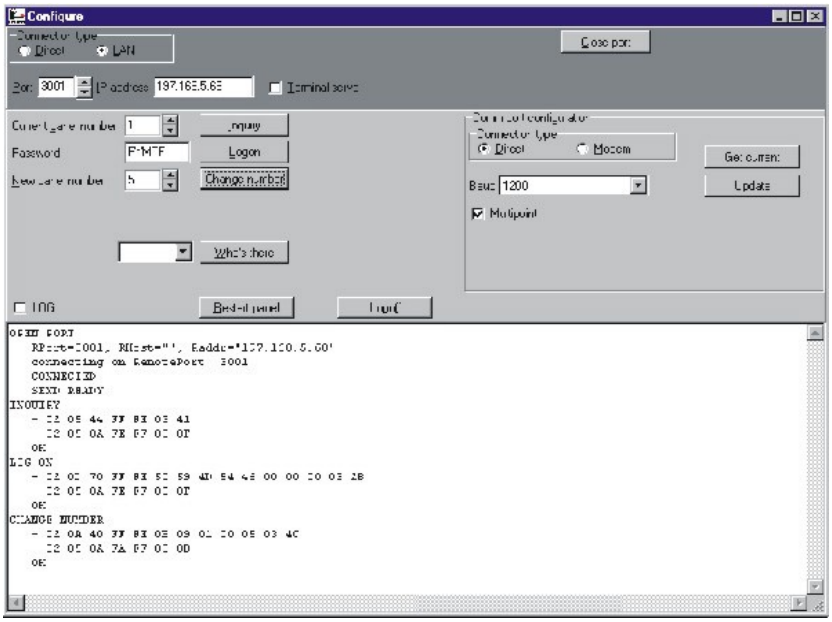


At this point the panel is ready to be configured.

Changing a Panel's Number

To change the current number of a controller or the default number (set in the factory), you must:

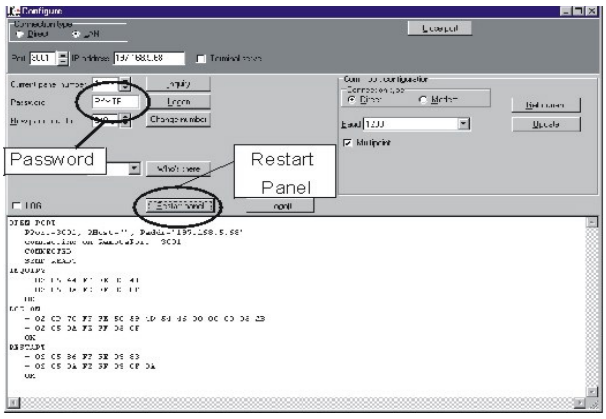
1. In the **Current Panel Number** window, type the present number (1-200) of the panel.
2. In the **New Panel Number**, type the number (1-200) you want to assign.
3. Click on the **Change Number** button.
4. Under the **Change Number,** you will see two lines starting with '-' and '+' followed by this last line stating OK. This means that the panel has been modified successfully.
5. Click on the **Restart** button to implement the modification(s).



Changing the Panel's Password

A default password of PYMTF is set for every panel at the factory. However, if you need to change the password to a particular panel, it's an easy process. Once you have logged onto a panel (using its current password) you can change the panel's password in a few simple steps.

1. In the **Password** box, delete the current password.
2. Type in new password (a maximum of 8 characters). Be aware that the password is case-sensitive.
3. Click on the **Restart** button to implement the changes to the panel.

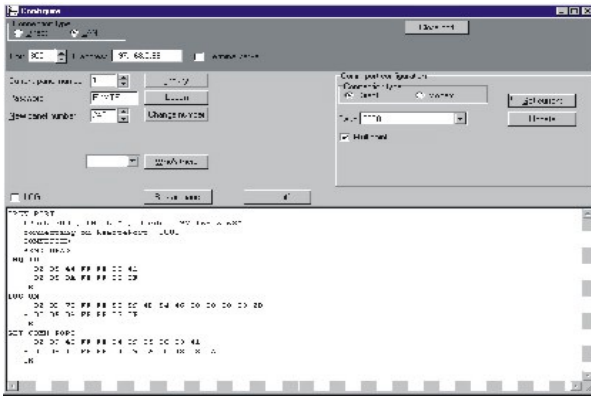


NOTE Once you change a password from its default (**PYMTF**), you must make the change in the **MicroLPM Setup/ Features** screen before it will communicate to the LiNC-NET.

Changing the Direct Connection/MODEM Configuration

To the right of the ConFigUL port section is the Comm port configuration section.

1. Click on the **Get Current** button. The panel will display the panel's current baud rate.



2. Click on the button next to **Direct** or **Modem** to change the connection configuration.
   - -If you are changing the connection to **Direct** and you using a RS-485 cable between your panels and the Host computer, check the **Multiport** button to allow different panels to share a common communications channel (Multidrop Protocol).
   - -If you are changing the connection to Modem, a Telephone numbers section will appear in the Comm port configuration square.

3. Click on the **Update** button to implement the changes to Comm Port configuration.

Changing the Connection Baud Rate- Modem/Direct

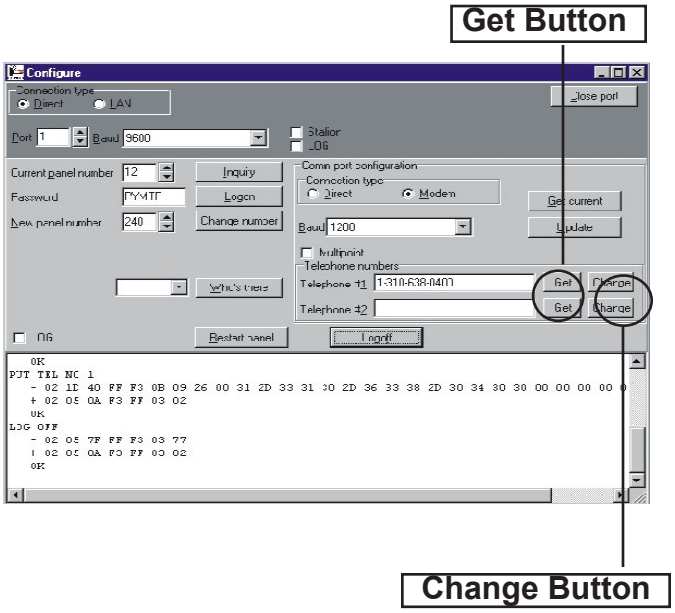
You may find it necessary to change the Baud Rate connection between the host and the panels in either a **Modem** or **Direct** connection. The default baud rate is 9600, however sometimes modem configurations differ or communication is smoother at a slower rate (i.e. when telephone lines experience induced noise due to bad weather conditions).

1. Click on the **Get Current** button. The panel will display the panel's current baud rate.
2. Click on the pull-down screen and select the appropriate baud rate.
3. Click on the **Update** button to implement the changes to the panel's baud rate.

Add/Change Panel-Modem Telephone Numbers

If you have changed the **Comm Port Configuration** or need to update the telephone number that the panel would dial to the Host computer, you can make changes in the **Telephone Numbers** section.

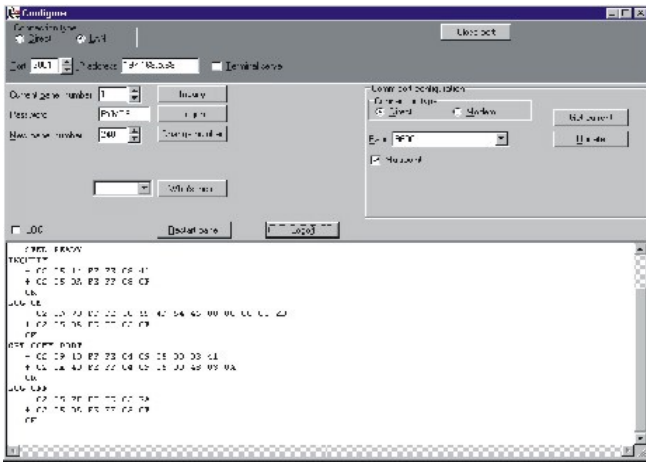
1. Click on the Get button for **Telephone #1** to confirm the phone number currently being used as the primary modem phone number.
2. If necessary, change the number in the **Telephone #1** box.
3. Click on the **Change** button to implement the changes to the panel's primary modem telephone number.



4. If necessary, repeat Steps 1-3 for **Telephone #2**.

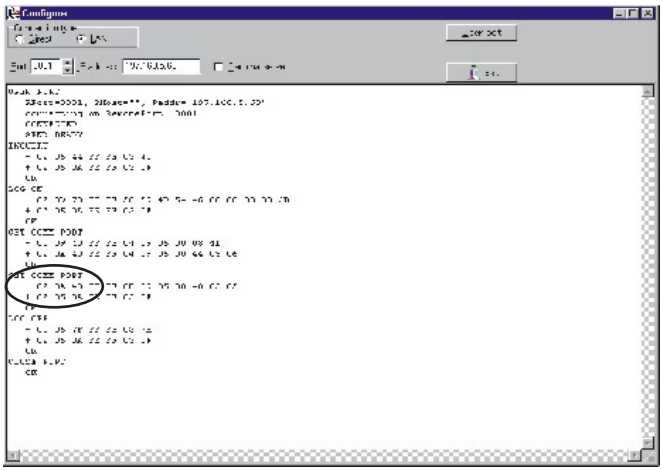
Logging Off from a Panel

Once you have made all the configuration changes necessary to the panel, remember to **Logoff** the panel. Though the panel will eventually **Logoff** by itself via a timer, you will eliminate any communication complications by logging off properly.



Exiting ConFigUL

At the end of your session with ConFigUL, click on the Close Port button, which ceases your connection to the panels and exits the Configuration Menu. You may exit ConFigUL or reestablish a connection using a different connection type (Direct or LAN).



ConFigUL- Configuration Glossary

Connection Type:

Direct	A connection using a RS232 or a RS485 cable
LAN	Connection through a network

Change — Click on this button when all information is set (Baud rate, connection type, telephone number, if choosing modem). Do not forget to restart the panel after each change.

Change Number — To change the current number of a panel or the default number (set in the factory), you must:

1. In the **Current Panel Number** window, type the present number of the panel.
2. In **New Panel Number**, type the number you want to assign.
3. Click on **Change Number** button.
4. Under **Change Number**, you will see 2 lines starting with '-' and '+' followed by this last line stating OK. This means that the panel number has been modified successfully.

Close Port — Closes the connection and exits from the configuration menu.

Get Current — Clicking on this button will give the current setting for the panel number set in "Current panel number": (Baud rate, connection type, modem information [if set], multipoint state).

IP Address — (LAN connection) Refer to your LAN administrator for the **IP** address of the terminal server/Ultimate MicroLPM and enter it in this block.

Logoff — Log off from the panel currently connected.

Logon — Log on to the panel to examine or change other settings (Baud rate, Protocol, etc.)

Modem — When this option is selected, it is possible to get/change the current telephone numbers already set in the panel. Don't forget to set the number of the desired panel in Current panel number window before performing any change.

NOTE Do not select Multipoint when the connection type is a modem!

Open Port — When the connection type has been chosen and configured, click on this button to open the port and start to configure or modify the actual panel setting.

Password — This password is used for the panel and when logging on LiNC-NET, version 5.11.2 (PYMTF is the default password set by the Factory).

Port	Allows you to select your COM port (Com 1, Com 2, Com 3, Com 4-13, etc.).
Restart	Restart the panel to implement all the information set for the current panel.
Terminal Server	**(LAN Connection)** Terminal Servers convert serial communication protocols to TCP/IP Ethernet protocol. Click on this option if you are using this type of device.
Who's There	Allows you to look from panel 1 to 200 and is used for identifying which panels are connected. The scroll menu on the left side of the **Whose There** button lists all the panel numbers found during this task. All panel numbers on the port chosen (whether by Direct daisy chain or LAN) will be listed below under **Who's There**, too.

Step 7- Using LiNC-NET

Remember-

In a **Multi-User** or **Concentrator** system, PC's must be booted up in the following order:

1. Host PC
2. Concentrator PC(s)
3. Workstation PC(s)

Booting up the system in a different order could cause network communication problems.

Also, in a Mullti-User or Concentrator system, PCs must be shut down in the following order:

1. Workstation PC(s)
2. Concentrator PC(s)
3. Host PC

Shutting down the system in a different order could cause network communications problems

Part 1- Coming and Going

Starting LiNC-NET

1. In **Windows,** press **Start** at the bottom of the screen. The menu will display a list of programs. Click on **Programs** and then click on LNv5.11.2.

2. Double-click on the **LiNC_NET** icon and the password menu will appear.

3. Enter **0** and then the password **PYMTF** to sign on to LiNC-NET. The **System** menu will appear.

NOTE If you have installed a client database, enter the name of the client before entering a password.

4. Click the **Password** icon or click on the **Password** heading.

5. Create your exit password for exiting LiNC-NET. Modify or enter new passwords for accessing each level (**Exit**, **Switching Menus**, etc.). The **Password** menu and the System setup will be described in following sections.

Exiting LiNC-NET

From the System Commands menu, press the **Log Off** icon to sign off LiNC-NET.

The **Sign-on** screen will appear. Enter your ID number and then the Exit password to terminate LiNC-NET.

NOTE In the course of setting up your system, a password system is installed that will allow varying levels of access to LiNC-NET NT/95. There will be both an access password and an exiting password.

To prevent data loss or corruption of the database while LiNC-NET is running, you MUST use your Exit password. DO NOT use a warm boot (CTRL-ALT-DEL) or a cold boot (Power switch off) to terminate the LiNC-NET application software.

Part 2- System Commands and Menus

System Menu A section of the LiNC-NET program that is used by the LiNC-NET Systems Administrators to establish the basic system parameters of LiNC-NET. The System Menu also gives access to features such the Password Menu, which are restricted from the User Menu.

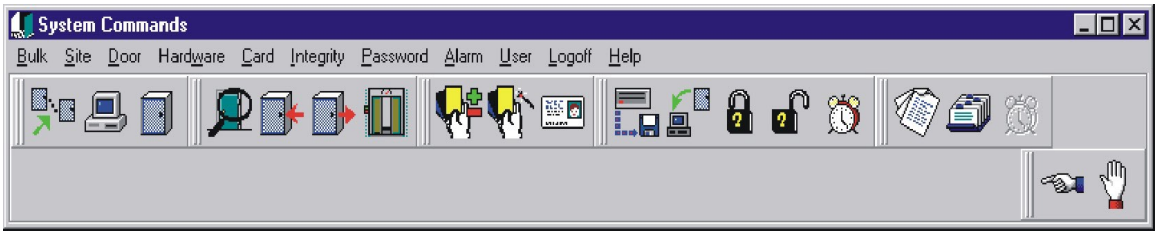
User Menu A section of the LiNC-NET program that is used by the normal operators of the LiNC-NET System. The User Menu functions for the day-to-day use of the LiNC-NET system, including activating and reactivating cards and establishing time periods and holidays. For a detailed description of the User Menu, please see the LiNC-NET 5.11.2 for Windows User Guide (Part# 37-10050-001).

The following steps outline the procedure to set up the system. Items 4 and 7 are defined in the **User Menu**.

1. Initialize the panels to user-selected default values. See Bulk initialization.
2. Configure the panels that vary from the default set in Step 1. See Site-MicroLPM configuration.
3. Configure the communication ports at the Host. See Site-Host configuration.
4. Select Request on-line for those panels that need to be on-line. See MicroLPM On-line.
5. Define doors and readers. See Door Overview.
6. Add cards. See Card (Add Card).
7. Define card authorization groups and time periods. See Card Authgroup.

System Commands

This chapter provides an overview of the System Commands Menu. The System Commands Menu is displayed after LiNC-NET is started from Windows-NT/98 and the Password has been entered. From the System Commands Menu all features and functions are accessible. After selecting a menu item, a set of options will be displayed. You can use either the mouse or keyboard command to initiate the function you wish to access.



The System Commands Menu and Tool Bar

The **System Commands Menu** is comprised of the following main menu items:

Bulk

Used for bulk initialization of data, including: card technology, access times, the date and time input format, card database format, and entry/exit options.

Site

Allows the administrator to configure the hardware (**Host Computer**) and system parameters for each panel. This menu also provides useful information for easy identification of a specific panel. Some of this data is not required for system operation and is entered for information purposes only. The panel model number identification, hardware options, entry/exit enforcement, and expiration dates for cards can be entered in this menu.

Door Overview

Configures door parameters such as card technology, access time, auto-unlock time, and two-person minimum occupancy rule. Access Actions: Define what (if any) action should automatically turn on or off, and program counter time outputs.

NOTE Familiarity with the panel functions is required to implement this function.

Hardware-Input

Configure sense input number, name to door number and assign the type of alarm, door sense, input counter, etc. Also, set the input polarity. Define the counter actions which will automatically occur when input transitions from state-to-state (Normal/Closed, Alarm/Ajar, Trouble /Forced), i.e., link the inputs to the outputs.

Hardware-Output

Name and define outputs and set their functions. These parameters determine when to turn on and off, as well as define the actions when entering and exiting time periods.

Elevator-ELV

Controls the destination of an elevator cab based on a card's authorization attributes. When a card is swiped at a reader inside a cab, the time period/floor group pairs assigned to the card are evaluated to determine which relays the card can activate at the current time. Of those relays, the ones that are assigned to the reader used are activated to engage the floor buttons from which the cardholder can make a selection

Card-
Add Card & Change Card

The **Card** menu defines the cardholder data. All options and here. Each card can be assigned with the following information: cardholder name, normal or long access, override capability with event lockout and access costs, escort status, entry/exit exemption, card group specification, affiliation, counter number class, PIN, authorization group, and expiration dates. Cards may be added or changed individually or in a group (bulk).

LiNC-ID

Refer to LiNC-NET manual P/N 33-10038-001

Integrity-
Upload

Upload is the converse of download. In other words, data from the panel is transferred to the hard drive of the LiNC-NET host. Files can be individually or collectively selected for uploading.

Integrity-
Backup

Only **History** files will be backed up to the selected drive.

Password

Each password is defined with access privileges that determine which functions are available to an operator. The initial system password is **PYMTF**. In addition to passwords and ID levels, class levels (None, System, User, Exit, and switch) can be designated for each operator.

Program Levels

In addition to passwords, program levels within the main access options (**System**, **User**, and **Switch** [**System and User**]) can be designated for each operator.

Alarms

LiNC-NET supports 2 types of alarms: 1) **Sense Input** and 2) **Transaction.** Sense input alarms are physical inputs driven by alarm devices, such as magnetic contacts and glass break and passive infrared detectors. Transaction alarms are created by historical transactions, such as an access denied, a disk error, a Logon occurrence, etc.

Alarm Acknowledgment

An alarm record may be defined at the **Host** by assigning a panel sense input record to a **Host** alarm record. When an alarm is detected at the panel, it can cause the corresponding alarm at the Host to be set and to log an alarm event to the journal file. An alarm condition at the Host/Workstation causes the alarm icon at the top of the screen to flash red-white and activates a break out box to acknowledge the alarms.

Logger

LiNC-NET maintains a logger (history) file comprised of records transferred from various panels. **History** records may be transferred (uploaded) upon the operator's request. The on-screen real-time journal appears when the "blue" button at the top of the screen is clicked on, and continues to scroll upward as transactions occur at the panels and readers. The logger records the following information: The PC host number (unless the system is a stand-alone unit), the panel number, the alarm status, the date and time logged, the date and time of occurrence, the name and location of where the transaction took place, and a code reference.

Reports

LiNC-NET is capable of producing reports to the screen or printer. The report setup window contains a tabbed notebook. The **Display** page allows the user to select the fields to be included in the report and the **Search** page allows the user to specify the search criteria. The **Display** page also contains buttons under **Change Heading** that allow the user to alter the heading and the column widths of the fields. Refer to **User Guide**.

User (Switch)

This allows you to switch from the **System Commands** menu to the **User** menu. The sign on password must have the **Switch** class selected.

Logoff

Logoff allows you to sign-off from LiNC-NET for Windows-NT/95/98 and return to **Password** entry.

Help

This screen assists in the data entry process and defines the criteria required for proper operation.

Data Entry and Modification

To display or make modifications to the LiNC-NET for Windows-NT/95/98 database, follow these instructions:

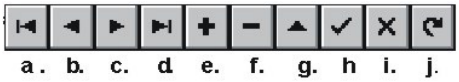
1. Enter a file selection. (Example: **Site**). Key letters are underlined in each file name. Press **Alt-S** to access **Site** files. The sub-menu listing displays **Host** and **MicroLPM**. Tab or arrow key to your selection. Press Enter. Or click on the selection or the icon with the mouse button.

2. Click on to the block that you wish to modify using the mouse or use the Tab key from the keyboard.

3. Position the cursor at the data field that you wish to modify or add to, and highlight the field by clicking on the block. A range window, described below, will appear on the screen for those fields that offer multiple options.

4. A data field can be modified in one of the following ways:

   a) Some fields require only a **Yes/No** confirmation. These are denoted by a **[ ]** for **No** and a **[x]** for **Yes**. Highlight the bracket area using the mouse or Tab key and click On or press Enter to confirm the selection.
   b) Some fields will display a list of options available for that field. Highlight the appropriate selection by clicking on the [?] button or scroll through the selections using the cursor control keys (arrow).
   c) Some fields require that the operator enter the data. (Example: the name field). Enter the data then press the mouse button or the Tab key to advance.
   d) Other fields will have a **navigator bar**, shown below, which will appear at the top of the file.



   a. Set the current record to the first record.
   b. Set the current record to the previous record.
   c. Set the current record to the next record.
   d. Set the current record to the last record.
   e. Add a new record.
   f. Delete the current record.
   g. Put the dataset in Edit state so that the current record can be modified.
   h. Write changes to the current record to the database.
   i. Cancel edits to the current record.
   j. Refresh the current record display.

All record fields (**System** and **User**) contain the legal keyboard character input.

Bulk Initialization

LiNC-NET enables the user to initialize every panel in the system to user-selected default values. **Bulk Initialization** defines the card technology; access times, the date and time input format, daylight savings parameters, card database format, and entry/exit options.

If you have just installed LiNC-NET using ConFigLN, then you will notice that the **Bulk Initialization** page is almost exactly the same as the **Create Data Base: Default Values** page. You will also notice that the entries made in the **Create Data Base: Default Values** page will appear here in the **Bulk Initialization** page.

Making Changes in Bulk Initialization

Select All Fields	This button selects all data fields. All fields will be displayed in bold.
Deselect All Fields	This button clears the selection for all data fields. All fields will be displayed in gray.
Select a Single Entry	Right-click on field to be changed. The field will be highlighted in bold.
Start Bulk Change of All Panels (Selected Felds)	This button starts the update of the elected fields for each panel.

To initialize all panels:

1. For each group of data to be initialized, select the group by clicking the mouse on the group name or within the group box not occupied by any field, then enter the value for the data field(s) in the group.

2. Select the **Start Bulk Change of All Panels (Selected Fields)** button.

Bulk Initialization: Card Technology

In this section, you must select the card reader technology that you will implement into your access control system. Select the appropriate type of card reader in the Format window.
The available card technology formats are as follows:

ProTech	BR-350, BR-351, BR-352, BR-370, BR-371, All Hughes ID Proximity Readers
MagStripe	BR-450, BR-451, BR-452, BR-470, BR-471
Watermark	Any Watermark card with the 12-digit format
PCSC Wiegand	34-bit PCSC Wiegand format, All Sensor Proximity Readers
Indala	Indala Proximity format
12-Digit	No site code; Magnetic Stripe
Sensor 26	Standard Sensor 26-bit format

NOTE BR-700 readers are setup as sensor 26 readers.

Sensor 34	Standard Sensor 34-bit format
Special	Special format
PCSC 37	Special 37-bit HID Proximity format
Corp_1000	Special 35-bit HID Proximity format
Motorola 32	Special 32-bit motorola Proximity format

A letter or additional reference description that describes the reader type can follow the card technology:

PIN-Pad	PIN Pad with the reader.
(I)	Insert Reader

Bulk Initialization: Door Lock Access Time

The **Door Access Time** is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.

You must select time values for both the **Standard Access** and **Long Access**

1. **Standard Access** is the normal door lock energize time. Select an access time from 1-253 seconds (2-253 seconds for elevator readers).

2. **Long Access** is the door lock energize time for cardholders that require a longer access time (i.e. an individual with a disability). Select an access time from 2-254 seconds (3-254 seconds for elevator readers).

Bulk Initialization: Card Table Format

Primary Expiration
If you select **Global,** the system automatically selects the **Primary** expiration date for all types of readers. You must select **Global**, if user-select **PIN** is to be used.
If you select **Park-Only** (then the expiration date (parking readers) is set to Date automatically), each cardholder has 2 card expiration dates. One date controls the access privilege for “parking” type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

PIN or Expiration Date (Parking Readers)
If you select **Park-Only** as the primary expiration choice the system automatically selects **Date**. If you select **PIN** (only available when primary expiration is set to **Global)**, you will have the capability of user-select 4-digit **PIN** codes. These **PIN** codes are used in conjunction with a reader and **PIN Pad**.

Names for Cardholders Exist
PCSC panel products have the ability to store the cardholder names within the panel itself. Selecting this option will decrease the number of cardholders in a standard MicroLPM 1016 to 600 cardholders (the capacity of the IQ/SIM panels are not effected by downloading). If you require names and more cardholders than 600, you will need to purchase a memory expansion kit for the MicroLPM.

12-Digit Card Number
Various card formats are available within the system. When using the **MagStripe** or **Watermark** format where a site code is not available, this option must be selected. The panel series supports 8 - 12 digit ABA Track 2 format data

Bulk Initialization: Daylight Savings

The Daylight Savings Cycle may be programmed into the panel.

Start Enter the date of the official start of Daylight Savings (In the U.S.- usually the first Sunday of April).

Stop Enter the date of the official end of Daylight Savings (In the U.S.- usually the last Sunday of October).

NOTES If the panel does not roll into Daylight Savings (no Start date programmed), then it won't roll out of Daylight Savings (even if a Stop date was programmed).

For **IQ-200** with **IQ 7.9.12Q** (or newer) firmware or SIM with **SI-7.9.15S** (or newer) firmware. The panel *will* automatically roll out of Daylight Savings Time even if it didn't roll into Daylight Savings Time.

Bulk Initialization: Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: Strict, Lenient, and Soft. Each enforcement level can be individually assigned to Parking, Department, or Building Type readers, but is enforced only when the Entry function and the corresponding Exit function readers are on the same panel.

NOTES Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

These panel firmware versions require the door to be opened before changing the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

Standard MicroLPM-	Version 1.9.7 and above
Plus 2 MicroLPM-	Version 3.9.7 and above
Plus 4 MicroLPM-	Version 7.9.7

All IQ and SIM panels require that the door be opened prior to updating the card status.

Strict Entry/Exit

The cardholder's entry/exit status must be in synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is **IN** then Department Status can be **IN** or **OUT**.
If the cardholder's Building Status is **OUT,** the Department Status must be **OUT**.
If the cardholder's Department Status is **IN** then Building Status must be **IN**.

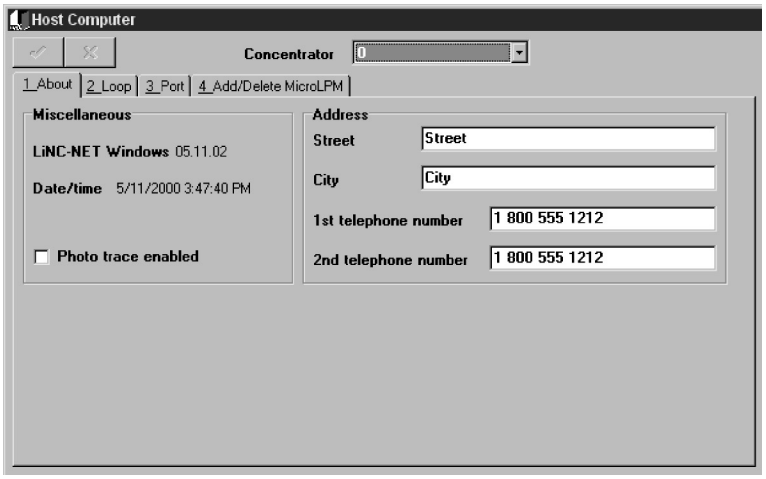
If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a building **IN** reader, the cardholder's building and department status must be **OUT**.

Lenient Entry/Exit
This level is the same as Strict except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

Soft Entry/Exit
This level follows the same rules as Strict except that an error transaction is recorded, all status levels are synchronized, and access is GRANTED.

Site/Host Computer- <Alt>S, H

Host Computer: About

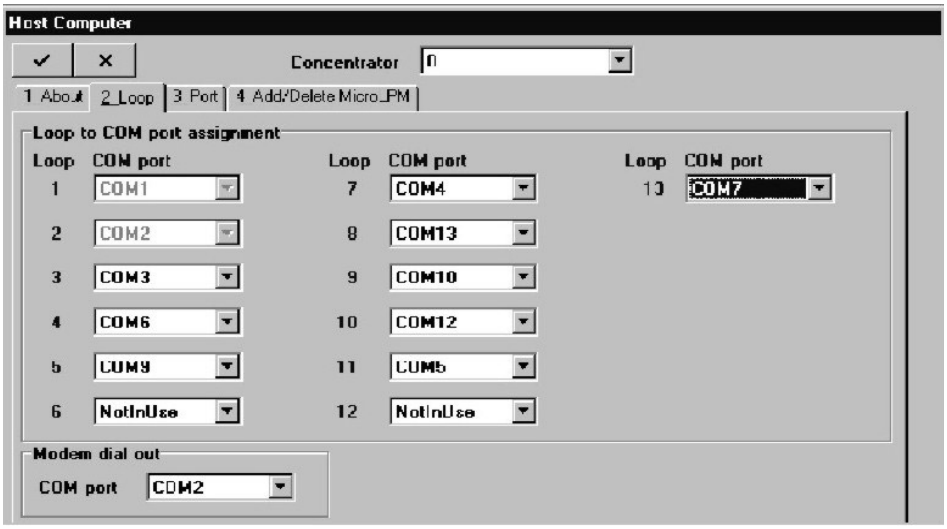


Miscellaneous The LiNC-NET Windows version is displayed here (entered at the factory). You will be asked to state this number when calling with inquiries. The current date and time at the Host PC is downloaded to each panel. In addition, the date and time are broadcast to each PC in a network, ensuring that all panels on-line will be synchronized.

NOTE The Host /Workstation/Concentrator PC's time is set in the Windows Control Panel, not in LiNC-NET.

Address Enter the street and city location of the PC Host. Two telephone numbers may be entered for the central computer center.

Host Computer: Loop



Loop to COM Port Assignment

Select the serial communication port number (COM 1, COM 2, COM 3, or COM 4) for one of 4 possible panel loops when you are NOT using a Stallion® port. If you are using a Stallion® port, then LiNC-NET is capable of 13 communication ports (COM 1 – COM 13). If no loop exists, select **NotInUse**.

Each communication port used for direct connect, LAN, or modem must be assigned to a loop before it can be used.

A COM port MUST be used for any LAN connection.

A Log Off MUST take place to initialize the COM port after any changes take place.

Modem Dial Out

A single AutoDial modem (e.g., U.S. Robotics Sportster 14.4 or 28.8/33.6/56k Fax-Modem) may be used at the PC for dial out to any of the panels in the LiNC-NET system. Consult factory for other compatible modems.

Select the port where the modem for auto-dial panels is connected. This COM port number must be different than the direct connect COM port number. If no auto-dial modem is being used, select **NotInUse**.

The COM port selected for this field must have the type of connection field set to modem.

For further information, refer to **Modem Restoration after Power Loss** Technical Bulletin **39-10052-001**.

Port Configuration

For the four possible COM port number configurations:

1. Make a selection in the Type of connection window (i.e., **NotInUse**, **Direct**, **MODEM**, **LAN**)

2. Make a selection in the BAUD rate window (i.e. 1200, 2400, 4800, 9600)

   NOTE While LiNC-NET can support baud rates up to 256 kbps, the panels only communicate at speeds of 1200, 2400, 4800 or 9600 bps.

3. If you have a **MODEM** installation, select the Telephone number (incoming) of the **PC Host MODEM** that will communicate with the panel.

4. Define the speed of the data transfer from the panel to the PC Host (the default rate is 9600 Baud). The system provides for 1200, 2400, and 4800, in addition to the 9600 rate. The phone number (incoming) of the Host must be entered here.

   NOTE The speed of the PC modem MUST be compatible with the panel's auto-dial modem.

Changing Baud Rate or Port Type:

1. If you are currently in Direct Connect mode, and wish to change the Baud rate ONLY:

a) Ensure that all panels are currently **On Line.**

b) If changes are required, click on **Host Computer Loop/Port** tab. (See **Host Computer Setup**). Make change(s) in menu.

c) Click on the check button to write changes to the hard disk.

d) Press Log off to access the **Sign On** password screen (do NOT exit from LiNC-NET for Windows-NT/95/98).

e) Enter the **Log On** password (NOT exit password) and you are back to the **System Menu**. The connection will be re-established automatically and the new Baud rate will be set.

NOTE If Baud rate was altered and the panel was not on-line, either alter it back to original setting or modify the panel's DIP switch configuration (for more information, see your panel's **Installation Manual**).

2. If you are currently in MODEM (auto dial) mode, and wish to change the Baud rate ONLY:

!Important! Baud rate changes should be made in a separate session. Do NOT combine this change with other downloading, which may cause the panel to restart.

a) If changes are required, click on **Host Computer Loop/Port** tab. (See **Host Computer Setup**).

b) Make Baud Rate change(s) in menu.

c) Click on the 'check' **[3]** button to write changes to the hard drive.

d) Repeat the following for all panels in the system:

i. Dial the panel and hang up by requesting Offline. (At this time, the user can still dial the panel or the panel can dial the Host and communicate at the original Baud rate).
ii. Continue this procedure until all the panels are dialed.

e) Press **Log off** to access Log Off password screen (do NOT exit from LiNC-NET for Windows-NT/95/98).

f) Enter password (NOT exit password) and you are back to the **System Menu**.

This will restart (warm boot) all affected panels.

3. If you are currently in Direct Connect mode, and wish to change the Port type to AutoDial ONLY:

a) Ensure that all panels are currently **On Line.**

b) If changes are required, click on **Host Computer Loop/Port** tab. (See **Host Computer Setup**).

c) Make **Type of Connection** change(s) in the menu.

d) Click on the check button to write changes to the hard drive.

e) Press **Log Off.**

f) For all affected MicroLPMs, on the panel PCB, change the RS-232/RS-485 jumper and DIP switch to let location 04 =8.X

NOTE X depends on Baud Rate: e.g. **8.8** for **9600** baud
8.2 for **2400** baud

For more information, see your MicroLPM Installation Manual- P/N 33-10019-001. For IQ and SIM panels, consult your panel's installation manual:
-IQ Installations Manual (P/N: 33-10036-001
-SIM Installations Manual (P/N: 33-10037-001

g) Exchange your direct connecting cable to a modem cable.

4. If you are currently in MODEM (auto dial) mode, and wish to change the Port type to Direct Connect ONLY:

!Important!! Baud rate changes should be made in a separate session. Do NOT combine this change with other downloading, which may cause the panel to restart.

a) If changes are required, click on **Host Computer Loop/Port** tab. (See **Host Computer Setup**).

b) Make **Type of Connection** change(s) in menu.

c) Press **Log off.**

d) For all affected MicroLPM's, on the panel PCB, change the RS-232/RS-485 jumper and DIP switch to let location 04 =8.X

NOTE X depends on Baud Rate: e.g. **8.8** for **9600** baud
8.2 for **2400** baud

For more information, see your MicroLPM Installation Manual- P/N 33-10019-001. For IQ and SIM panels, consult your panel's installation manual:
-IQ Installations Manual (P/N: 33-10036-001
-SIM Installations Manual (P/N: 33-10037-001

e) Exchange your direct connecting cable to a MODEM cable.

5. If you are currently in LAN mode, and wish to change the IP address type ONLY

a) If you wish to change the IP address, click on the **MicroLPM Setup Hardware** tab.

b) Under LAN connection, highlight the current address in the **IP Address** block

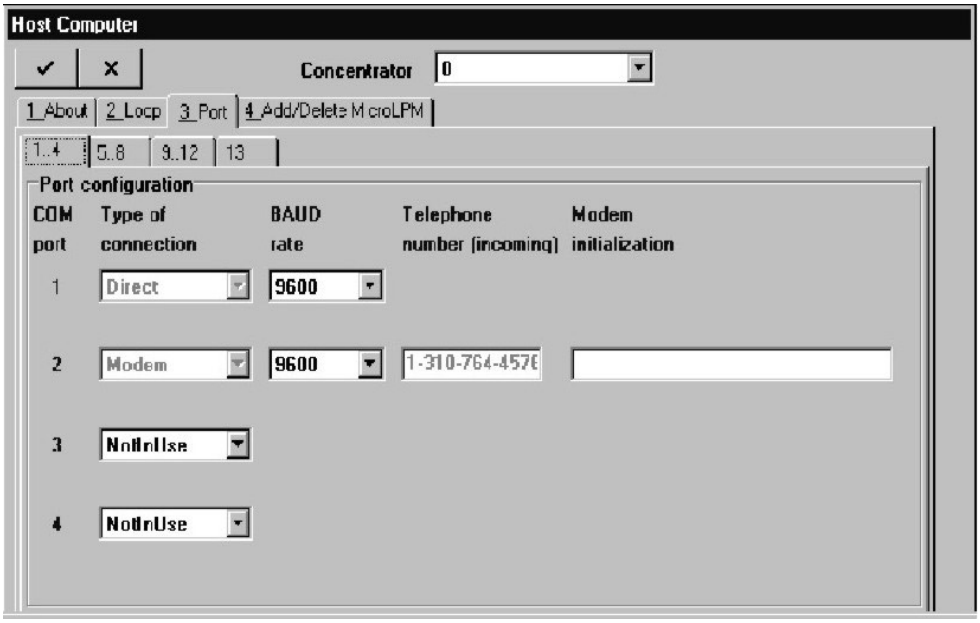
c) Enter the new address.

d) Consult with your LAN administrator or MIS personnel to ensure the correct address (when using a LAN connection, make sure that the terminal server is connected to the panel).

e) Click on the “check” box at the top left side of the menu to save the new address.

f) Press **Log off**.

Host Computer: Port



Port Configuration This section should display the com ports that have been configured in ConFigUL. There are four screens displaying COM ports 1 – 13

Type of Connection
-Direct (Direct Connect RS232/RS485 type)
-Modem (Autodial up connection)
-LAN [Local Area Network through an Ethernet (NIC) Network Interface card
-NotInUse (if the com port is not utilized by the LiNC-NET)

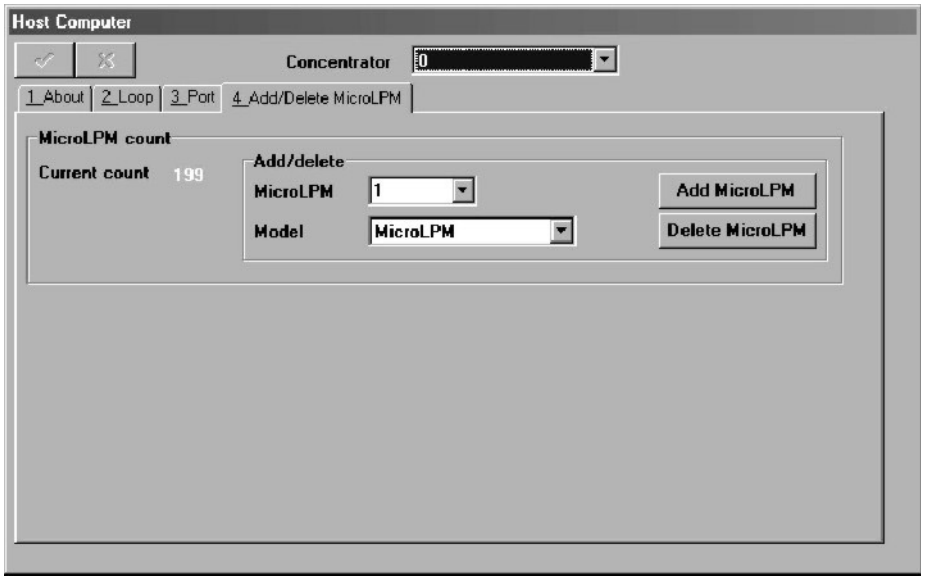
Baud Rate 1200, 2400, 4800, 9600, 14k, 19k, 38k, 56k, 57k, 115k, 128k, 256k

Telephone Number Phone # of modem installed at LiNC-NET Host PC

MODEM intialization AT (Attention) commands used to train an external MODEM connected to a COM Port.

Adding or Deleting a Panel

The data bases for panels are added to and deleted from the database as necessary.

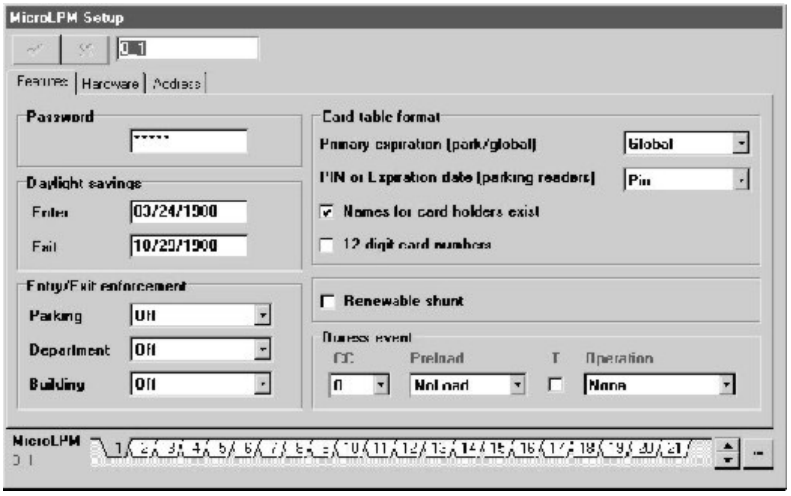


Current Count This file indicates how many panels are currently part of your system. To add or delete a module, enter the number of the panel and click on the arrow button to select the model type. Press Add MicroLPM or Delete MicroLPM.

Up to 200 panels may be added. When adding a new panel into LiNC-NET all the information from the Bulk Initialization page will automatically default to the new panel.

Site/MicroLPM

Site/MicroLPM: Features



Password
The default password **PYMTF** (set at factory) is used to logon the panel during the initial set-up. It is recommended that once communication is established with the panel (on-line), the password should be changed. Since **PYMTF** is used for initial set-up, you must use **PYMTF** to logon, each time a new panel is added to the system.

Daylight Savings
The Daylight Savings cycle may be programmed into the panel.

Enter Enter the date of the official start of **Daylight Savings.** In the US, it the first Sunday in April. Enter the date that daylight savings begins in month, day, year format (e.g., 04/04/99).

Exit Enter the date of the official end of **Daylight Savings**. In the US, it is the last Sunday in October. Enter the ending date in the same format (e.g. 10/24/99).

NOTE So that LiNC-NET will be Y2K compliant, the PC must be configured for a 4-digit year format. Consult the Windows® Control Panel/Regional Settings and select the **Short Date** format of **mm/dd/yyyy** and the **Long Date f**ormat of **mm/dd/yyyy** to accommodate the LiNC-NET for uninterrupted (proper) operation.

Entry/Exit Enforcement
Each panel supports 3 separate levels of **Entry/Exit** enforcement: **Strict**, **Lenient**, and **Soft**. Each enforcement level can be assigned individually by **Parking, Department**, or **Building**-type readers, but is enforced only when the Entry function and its corresponding **Exit** function reader(s) are on the same panel. **Entry/Exit Enforcement** cannot function (at any of the 3 levels) if the **Entry** reader(s) are on one panel and the corresponding **Exit** readers are on another panel.

NOTE **Version 1.9.7 and above for Standard MicroLPMs**
Version 3.9.7 and above for Plus 2 MicroLPMs
Version 7.9.7 for Plus 4 MicroLPMs

These firmware versions *require* the door be opened before charging the card status, repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened.

NOTE All IQ and SIM Panels *require* that the door be opened prior to updating the card status

Strict Entry/Exit
The cardholder's entry/exit status must be synchronized with the system, otherwise an entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, and parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's **Building Status** is **IN**, then the **Department Status** must be **OUT** or **IN**.

If the cardholder's **Building Status** is **OUT**, then the **Department Status** must be **OUT**.

If the cardholder's **Department Status** is **IN**, then the **Building Status** must be **IN**.

If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a building IN reader, the cardholder building and department status must be **OUT**.

Lenient Entry/Exit
This is the same as Strict except on the first use of the card; the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him accesses.

Soft Entry/Exit
Same as strict except that an error transaction is recorded, statuses are synchronized, and access is GRANTED.

In Case of LockIn/LockOut

To restore operation to a card whose owner has been locked in or out due to an entry/exit (anti-passback) violation, simply deactivate and then re-activate the card from the **Change Card** screen with the panel(s) **online**.

NOTES Depending on the MicroLPM firmware version, when toggling status for In/Out of doors, either an Authorized card or an Authorized card followed by a door open activation, will toggle In/Out status.

MicroLPM Firmware versions 1.9.7 and 7.9.7 or higher provide for an Authorized card followed by a Door Open to toggle In/Out status.

MicroLPM versions 1.96, 3.96, 5.96, or 7.96 or lower provides for an Authorized card ONLY to toggle In/Out status.

All IQ and SIM panels require that the door be opened prior to updating the card status.

Card Table Format

Primary Expiration (Park/Global

Panels support parking, department, and building type readers. The system can automatically expire a card for **Parking Only** readers, if the **PARK-ONLY** is selected. Click on the options:

-Park-Only

Selects a secondary card expiration date to be used at parking-type readers.

-Global

Selects a primary card expiration date to be used at all readers

PIN or Expiration Date (Parking Readers)

Because there is a limitation of cardholder space in RAM in the panel, the Global expiration date automatically selects the PIN option. Conversely, selection of the Park-only option selects the date option.

Names for Cardholders Exist

The cardholder file within the standard MicroLPM panel can be configured with or without names. If the panel is configured with names, it requires more memory space and lowers the card capacity. However, All “Plus” series MicroLPMs default to cards with names. For IQ and SIM panels, downloading names has no bearing on card capacity

Select **“X”** if names for cardholders exist in the system. If this section is changed, **System Parameters** and **Cards** files must be downloaded to the panel in order for the changes to take effect.

12-Digit Card Numbers

If this section is changed, **System Parameters** and **Cards** files must be downloaded to the panel in order for the changes to take effect. Various card formats are available within the system.

When using MagStripe or Watermark formats, where a site code is NOT available, this option must be selected. The IQ/SIM/Micro-series supports 5 to 12-digit ABA track 2 format data. Select this option if the cards being used are 12-digit cards or do **NOT** select if cards are binary.

Renewable Access

The Renewable Access renews the access time for the egress. The card swipe occurs before the previous completed transaction. It is recommended that the access time be set equal to, or longer, than the shunt time to avoid problems.

Duress Event

A control counter can be activated when a duress code is entered by the cardholder. Once a sense input has been selected, an output must now be assigned for an alarm. **Pre** is the Preload action and **Op** is the Operation.

The duress code is the Normal **PIN** code, except that the first and second digits are incremented by one. If the first or second Regular PIN digit is **9**, the duress code digit is calculated as a **0**.

Select a Control Counter that will enable an output for duress (1-40). Refer to **Access Action** (at reader).

NOTE Duress can only be initiated from a cardreader WITH PIN pad, NOT from a PIN pad only terminal.

Example of Duress PIN code Assignment:

Regular	**DURESS**
3129	4229
1999	2099

Do NOT assign user-defined PINs **0000**, **0911** and **9811**, as they are reserved by the system.

NOTE User-defined pin codes are programmed in the Card Add or Card Change screens.

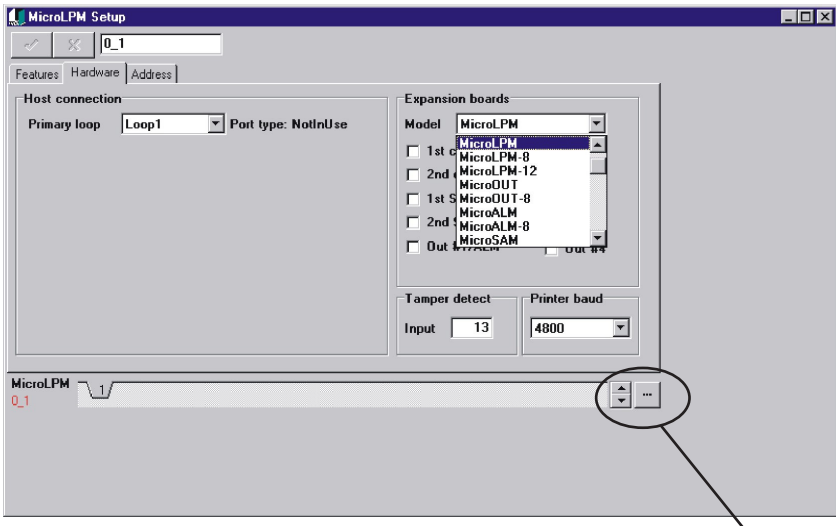
Site/MicroLPM Setup: Hardware

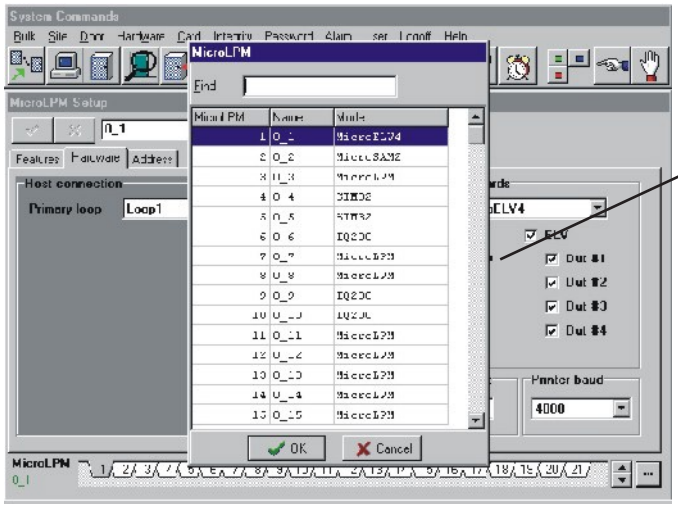
The screen will display a different list of options depending on what was configured in the Host Computer panel. Direct, Modem, LAN, or NotInUse can be specified in the Host Computer panel and one of the following screens will display as a result.

DIRECT

Host Connection

Primary Loop: Select the loop number to configure to which communication port this panel will connect. Refer to Host Computer Setup. The type of connection is displayed to the right of the loop selection: **Direct** for direct connection.





Click on the **Scroll** button and select the panel type from the list to be defined. Then click on the OK button.

MODEM

Host Connection:

Primary Loop: Select the loop number to configure to which communication port this panel will connect. Refer to Host Computer Setup. The type of connection is displayed to the right of the loop selection: **Modem** for modem connection.

Modem control (when primary loop is a modem)

Outgoing Calls

Secondary Loop Select the loop number for the secondary connection. In the event that the LiNC-NET system has more than one dial-up panel (**IQ**, **MicroLPM**, **Ultimate**) it is possible that they could be attempting to notify the HOST PC of an alarm or a backlog of events by dialing in at the same time. Although only one panel would be able to connect to the dial-out modem (see **HOST Computer Setup**), it can dial into and receive calls from panels. To alleviate contention, additional internal modems (up to 3 as long a COM port isn't already assigned for **Direct** or **LAN** connected panel(s)) may be installed in the HOST PC that can receive incoming calls.

NOTE Only the modem designated in the HOST computer's set-up screen as **dial-out** can initiate a call from the PC to a control panel. The additional modem(s) are for receiving calls only.

Each modem inside the HOST PC has its own *dedicated* telephone line, and therefore its own telephone number. When the **secondary loop** is specified to be a loop number assigned to one of the modems that only receives calls, then the panel will first attempt contacting the host via the **primary loop**. If the **primary loop** is busy, than the **secondary loop** will attempt a dial-up connection to the HOST.

A maximum of two loops may be assigned to any access panel for dialing into the HOST. Also, the PC can accommodate up to a total of four internal modems (only one can dial out from the PC). Therefore, different secondary loop numbers can be assigned to different panels to minimize contention.

History Tansfer When a panel is connected to LiNC-NET over a dial-up modem, history transactions are transmitted to LiNC-NET under the following conditions:

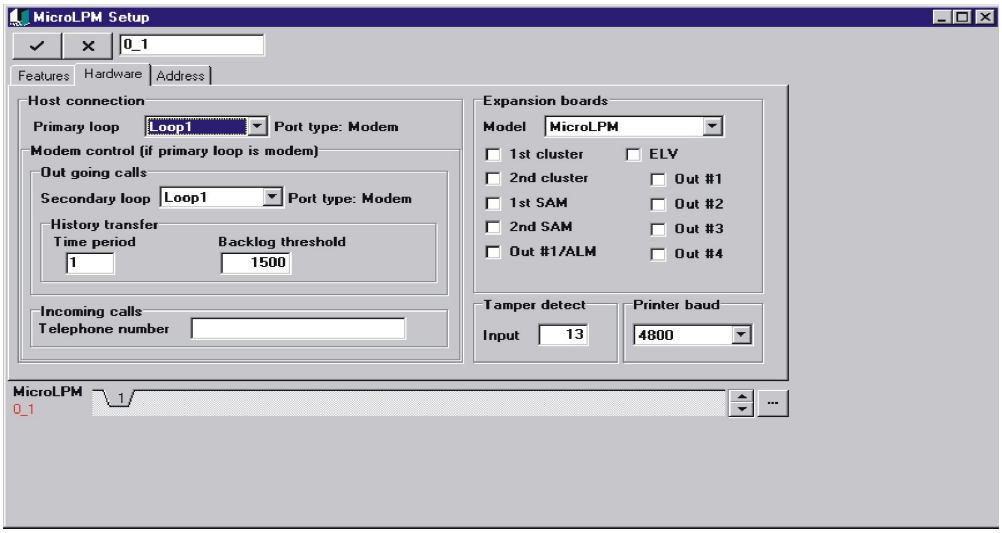
1. Upon an alarm
2. At the start of the Time Period
3. At a pre-defined number of transactions

Time Period Select the Time Period when the panel will call the Host to upload its transaction buffer. The panel will call automatically at the start of each segment within the time period selected.

Backlog Threshold Defined as the number of transactions that will be recorded in the panel before it automatically calls the HOST to transfer the information. For a standard panel setup, we recommend a backlog threshold of 300 to insure that more recent ones do not overwrite older transactions.

NOTE Failing to transfer messages will create gaps in subsequent History reports.

Telephone Number Enter the phone number of the AutoDial modem to which the panel is connected.

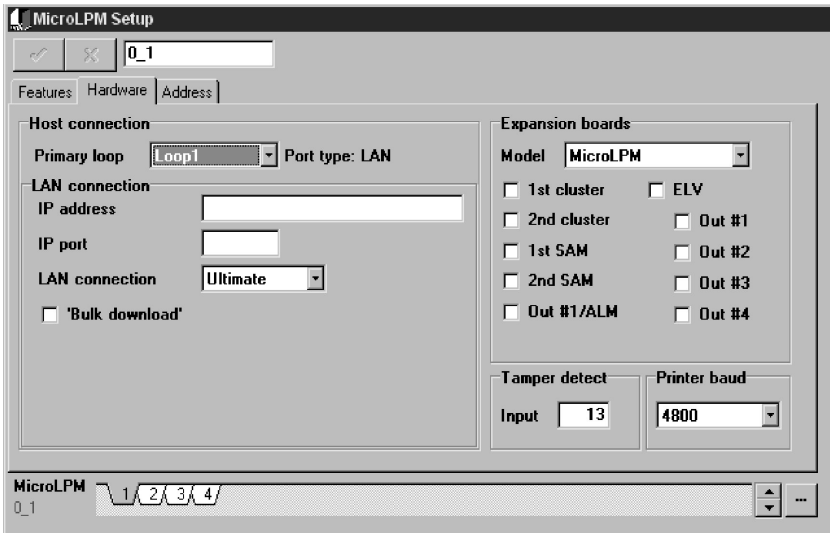


LAN

Host Connection

Primary Loop Select the loop number to configure which communication port this panel will connect. Refer to Host Computer Setup. The type of connection is displayed to the right of the loop selection: **LAN**.

Host Connection is defined as a "modem" type of COM Port. The History transfer parameters and telephone number to dial intothe panel are defined here.



Backlit Screen- illustrates that the COM Port is in use (Panel is requested online.) and no changes can be made.

LAN Connection

IP Port

-For LANtronix Terminal Server, enter 3001
-For Ultimate, enter 2001
-For Black Box Terminal Server, enter 3001.

IP Address Enter the IP address for the selected Terminal Server. Consult with your LAN administrator or MIS personnel.

When using a LAN connection, make sure that the Terminal Server is connected to the panel. The PC Host may require a DB25 or DB9 female end connector depending on your PC COM port type. The Terminal Server end may require a DB25 male end connector or mounting to screw terminals.

For further information regarding the LANtronix Terminal Server, refer to **Technical Bulletin 39-10056-001**.

NOTE For further information regarding the Ultimate; refer to Installation Guide 33-10035-001.

Tamper Detect Enter the sense input number 13 for tamper detect.

Printer Baud Rate Define the speed of the serial printer that is connected to the panel:
-MicroLPM -1200, 2400, 4800, 9600
-IQ/SIM – 9600 only

Options for all Three Types of Connections

Expansion Boards: Model — **The Micro-series products come in a variety of hardware configurations. In order to operate properly, the hardware model must be selected from the following:**

IQ200	2-reader interface
IQ200/SAM	2-reader interface with 8 supervised inputs
IQ200/SAM2	2-reader interface with 16 supervised inputs
IQ600	6-reader interface
IQ600/SAM	6-reader interface with 8 supervised inputs
IQ600/SAM2	6-reader interface with 16 supervised inputs
IQ1000	10-reader interface
IQ1000/SAM	10-reader interface with 8 supervised inputs
IQ1000/SAM2	10-reader interface with 16 supervised inputs
SIM	34 inputs, 4 outputs
MicroLPM	4-reader interface
MicroLPM-8	8-reader interface
MicroLPM-12	12-reader interface
Micro-OUT	4-reader interface with 16 inputs, 16 outputs
MicroOUT-8	8-reader interface with 16 input, 16 outputs
MicroALM	4-reader interface with 16 inputs
MicroALM-8	8-reader interface with 16 inputs
MicroSAM	4-reader interface with 8 supervised inputs
MicroSAM-8	8-reader interface with 8 supervised inputs
MicroSAM2	4-reader interface with 16 supervised inputs
MicroSAM2-8	8-reader interface with 16 supervised inputs
MicroELV	4-reader interface with 16-floor control
MicroELV2	4-reader interface with 32- floor control
MicroELV3	4-reader interface with 48-floor control
MicroELV4	4-reader interface with 64-floor control
Ultimate	4-reader interface with 8 inputs, 8 outputs
Ultimate8	8-reader interface with 16 inputs, 16 outputs
Ultimate12	12-reader interface with 24 inputs, 24 outputs
Ultimate/SAM	4-reader interface with 8 inputs, 8 outputs, 8 supervised inputs
Ultimate8/SAM	8-reader interface with 16 inputs, 16 outputs, 8 supervised inputs
Ultimate12/SAM	12-reader interface with 8 inputs, 8 outputs, 8 supervised inputs
Ultimate/SAM2	4-reader interface with 8 inputs, 8 outputs, 16 supervised inputs
Ultimate8/SAM2	8-reader interface with 16 inputs, 16 outputs, 16 supervised inputs
Ultimate12/SAM2	12-reader interface with 8 inputs, 8 outputs, 16 supervised inputs

Custom

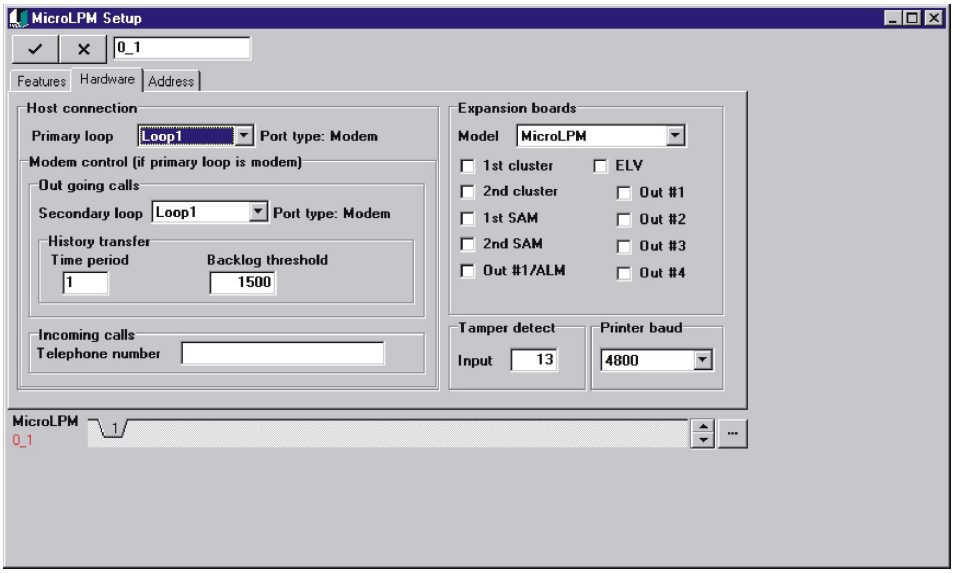
If you have a NON-standard configuration, you can select the individual expansion board(s) from the list below. The system will automatically label your configuration as Custom.

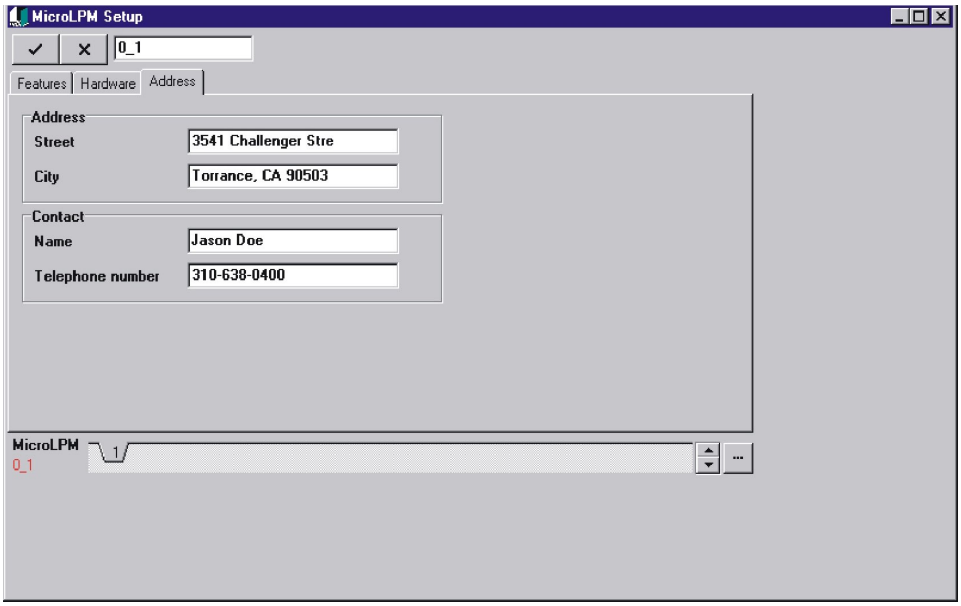
NOTE Output Control and Alarm Monitoring may NOT be configured together. ELV (Elevator Control) can only be configured with Output Control boards (1 or more).

Site/MicroLPM: Address

Address Enter the address of the site where the panel is located.

Contact Enter the Name and number of the Person to contact in regards to the LiNC-NET/Panel system.





Door

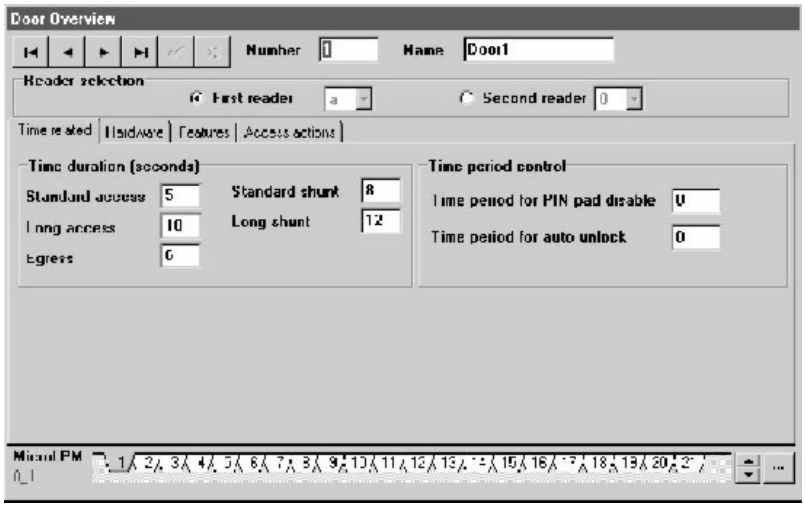
Overview

For the following door configuration data entry, enter the door number to be configured and also assign a name to the door (example: Executive). Don't forget to select the panel that is being used in the door configuration. At the bottom of the screen, position the mouse cursor on the tab for the appropriate panel and click on the index tab.

Also enter the reader selection data. Each panel supports up to 2 readers per door. If the first terminal letter for a door will be changed from the default, enter the letter from the range (a through l). If a second reader terminal for a door will be changed from the default, it will always be different from the one programmed as the first reader. Enter the letter from the range (a through l). If you are not utilizing entry and exit readers, bypass this section. If the doorway has an entry and an exit reader, you must define the reader number for the second reader. This will allow standard lock output and door sense control via software control, NOT hardware control. The selection will take away from the total number of terminals used for doors.

NOTE Before a reader can be assigned as a second reader, it must be dissociated from its current door assignment as a first reader. This means to assign reader b on door 1 it must be dissociated (assign readers as the first reader) from door 2.

Door Overview: Time Related



Time Duration (Seconds)- Access time is the amount of time that a door lock is energized. There are two access timers for each door lock: Standard and Long (for handicapped). The choice of which timer to be used will be determined by the cardholder's Long attribute.

Enter the access time by using the command keys. The standard length of time is 5 seconds for Standard access and 10 seconds for Long access. Enter 1 for the quickest access time or 255 for the longest. Long access time follows the same parameters, and will be used in the event more time is required. Long Access values are always at least 1 second longer than standard values.

Ranges for Time Values (in seconds):

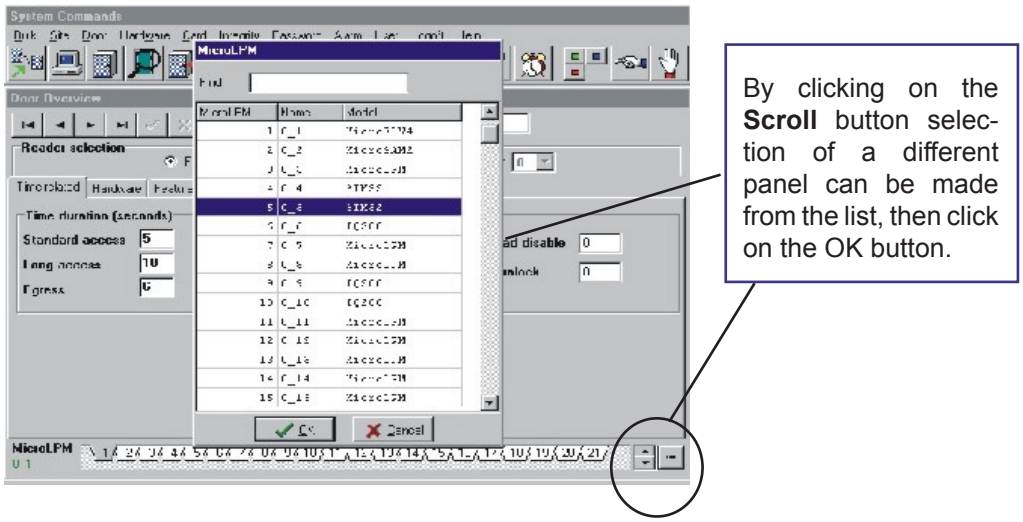
Standard Access:	1-253
Long Access:	2-254
Egress:	1-253
Standard Shunt:	2-254
Long Shunt:	3-255

For Elevator Readers:

Standard Access:	2-253
Long Access:	3-254
Standard Shunt:	3-254
Long Shunt:	4-255

Egress (unlock) time utilizes Standard Shunt time.

NOTE Attempts to program Time duration less than 2 seconds in an elevator-type reader will cause floor relays to NOT be engaged upon card authorization even though the green LED will momentarily light on the reader.



Egress (Request to Exit) time has a range of 1-253 seconds. Enter the time length desired.

Standard Shunt The length of time to disable the door status alarm during normal egress is the standard shunt time. The default time is 8 seconds. Enter a different amount of time, if necessary. Shunt time is always at least 1 second longer than the corresponding access time.

Long Shunt The length of time to disable the door status when a card-holder with the Long Access feature presents a card is the long shunt time. The default time is 12 seconds. Enter a different amount of time if necessary.

Time Period Control An entryway, when controlled by a PIN pad and a reader, may not require the use of both devices during peak or normal business hours.

Time Period for PIN_Pad Disable The PIN Pad may be automatically disabled during these periods by defining the Time Period to disable the use of the PIN Pad (0-999). The user will only be required to use the cardreader and bypass entering the PIN code during this time period. To select the Time Period for PIN Pad disable, enter the Time Period number desired.

Time Period for Auto Unlock

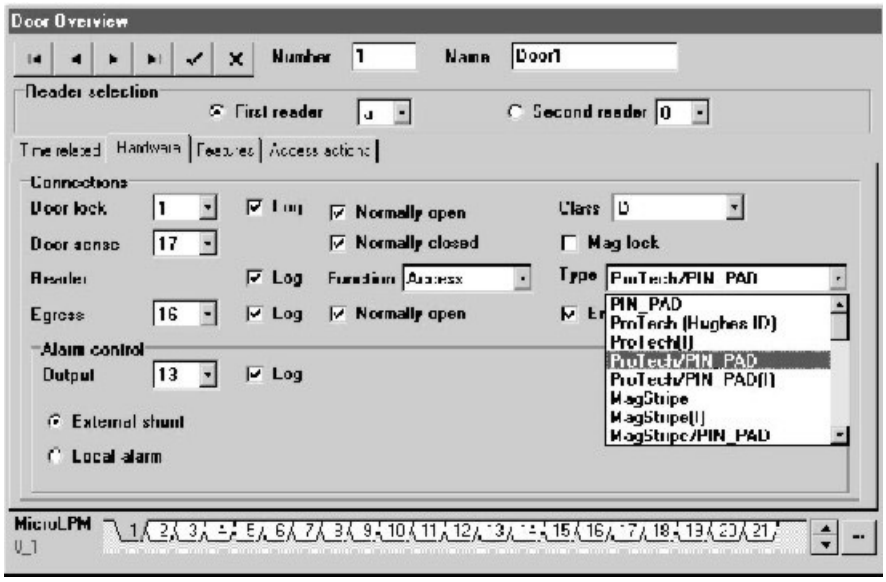
Scheduled automatic door openings can be programmed by defining the time period (0-999) when the door is to be unlocked. If this option is selected, the door remains unlocked until the designated time period expires. If this option is not selected, the door remains locked until and authorized card or egress transaction occurs. Users will NOT be required to use their cards or PIN codes during this time period.

Door Overview: Hardware

Door assignment criteria consists of sense inputs, control counters, and terminal combinations. The default assignments are set up as follows:

Default Door Sense Inputs	are ODD numbers from 17 to 39
Reader Detect Sense Inputs	are numerical from 1 to 12
Default Egress Sense Inputs	are EVEN numbers from 16 to 38
Lock Control Counters	are in numerical order from 1 to 12
Door Shunt/ Local Alarm Control Counters	are in numerical order from 13 to 24

The first reader terminals are assigned by the 12 alphabet characters **a**, **b, c**, etc., through l on Panel-12. If a second reader will be assigned to one door, it will be taken from one of the other 11 readers **NOT** assigned to another door.



Hardware Connections Pt. 1

Door Lock This connection specifies the output number (1-12) where the electric lock for this door is connected. (Refer to your specific Installation Guide for output location and number.) If a door lock control counter number will be changed from the default, enter the number from the range available (1-12). This output will be connected to the electric lock at the door.

Log Select this option if lock transactions will be logged.

Normally Open When this field is selected ([X]), the quiescent state of the door relay is de-energized. This will cause continuity to exist between the common and normally closed contacts. When an access operation or an egress (with energize) operation occurs, the door relay will momentarily energize to temporarily complete continuity between the common and normally open contacts.

When this field is NOT selected ([ ]), the quiescent state of the door relay is energized. This will cause continuity to exist between the common and the normally open contacts. When an access operation or an egress (with energize) operation occurs, the door relay will momentarily de-energize to temporarily complete continuity between the common and the normally closed contacts. Depending upon the type of door hardware used (magnetic lock or door strike) and how the door is programmed will determine whether it operates as a Fail Safe or Fail Secure environment.

Door Strikes- Fail Safe
For door strikes, power is required to unlock the door. Therefore in a fail-safe environment, wire the door strike hardware across the common and normally closed relay contacts. Do **NOT** select (**[ ]**) the **normally open** field. When the door relay is in its quiescent state, the door will be locked. But upon card transaction or egress (with energize) operation, the relay will de-energize and the door will become momentarily unlocked. In the event of a power outage to the panel, this will permit the door relay to de-energize and for continuity to exist between the common and normally closed contact. Power from the battery-backed power supply will now be applied to the strike causing it to unlock, until either the battery discharges or panel power is restored.

Door Strikes- Fail Secure
However, in a fail secure environment, wire the door strike hardware across common and normally open contacts. Then, select **([X])** the **normally open** field. When the door relay is in its quiescent state, the door will be locked. But upon card transaction or egress (with energize) operation, the relay will energize and the door will become momentarily unlocked. In the event of a power outage to the panel, this will permit the door relay to de-energize and for continuity to exist between the common and normally closed contacts. Power from the battery-backed supply will now be removed from the strike causing it to lock.

Magnetic Locks- Fail Safe
Conversely, for magnetic locks, power is removed to unlock the door. Therefore, in a fail-safe environment, wire the magnetic lock across the common and normally open contacts. Do **NOT** select **([ ])** the **normally open** field. When the door relay is in its quiescent state, the door will be locked. But upon card transaction or egress (with energize) operation, the relay will de-energize and the door will become momentarily unlocked. In the event of a power outage to the panel, this will permit the door relay to de-energize and for continuity to exist between the common and normally closed contacts. Power from the battery-backed power supply will now be removed from the magnetic lock, causing it to unlock until panel power is restored.

Magnetic Locks- Fail Secure
However, in a fail-secure environment, wire the magnetic lock across common and normally closed contacts. Then, select **([X])** the **normally open** field. When the door relay is in its quiescent state, the door will be locked. But upon card transaction or egress (with energize) operation, the relay will energize and the door will become momentarily unlocked. In the event of a power outage to the panel, this will permit the door relay to de-energize and for continuity to exist between the common and normally closed contacts. Power from the battery-backed supply will now be applied to the magnetic lock causing it to secure until the battery discharges.

Summary of the Four Possible Fail-Safe/Fail-Secure Cases:

When using **door strikes**-

-For **fail-safe** operation, wire to COM and N.C. contacts and do **NOT** select (**[ ]**), the **normally open** field.

-For **fail-secure** operation, wire to COM and N.O. contacts and select (**[X]**), the normally open field.

When using **magnetic locks**-

-For **fail-safe** operation, wire to COM and N.O. contacts and do NOT select (**[ ]**), the **normally open** field.

-For **fail-secure** operation, wire to COM and N.C. contacts and select (**[X]**), the **normally open** field.

Hardware Connections Pt. 2

Door Sense This connection describes the sense-input number for the door sense (door status/door position) contact. Refer to your specific **Panel Installation Guide** for sense Input location. If the door sense input contact for the door will be changed from the default, enter the number from the range available (0, 16-55, or 56-71 in an ALM or OUT configuration).

Range Designations

16-23 MicroLPM
24-31 MicroLPM8
32-39 MicroLPM12
40-47 SAM1 (supervised door sense)
48-55 SAM2 (supervised door sense)

16-19 IQ 200/400
16-27 IQ 600
16-35 IQ 1000

16-23 SIM 4
16-31 SIM 8

Normally Closed Click on if the door lock sense input contact is **Normally Closed.** A **Normally Closed** sense input will lock the door when the system detects an open circuit except when using the Maglock option.

Maglock When selected, this option will terminate the door lock control counter activation upon door closure. Otherwise, the system will terminate the door lock control counter activation upon a door opening. This option is related to card reader transactions, as well as egress operations for the specific door. The purpose of this option is to permit the door to be *fully* opened while preserving the magnetic locks deactivated state. Without this option, at the moment when the door switch contacts changed their state (indicating that the door was “slightly” opened), the power to the magnetic lock would be restored. This condition could cause the lock to immediately pull in and, prematurely, secure the door prior to the person passing through the access point.

Meanwhile, the transaction would be recorded as though the person actually did pass through the door. The shunting of the door switch contacts (shunt time) is terminated differently depending upon whether the magnetic lock option is selected. When the Maglock option is selected, upon a card transaction or an egress operation, the shunt time begins when the access time expires. In other words, when the door is unlocked and then opened, as the door switch contacts are immediately shunted prior to unlocking, the door remains unlocked until either it is closed or until its access (unlock) time expires. Should the door still be open when the access time expires, then the shunt time will begin at this point in time. However, if the door is closed prior to the access (unlock) time expiring, the door shunt time is immediately canceled. Hence, the overall duration of the door being shunted is the access time plus the shunt time. When the Maglock option is NOT selected, then upon a card transaction or an egress operation, the shunt time begins as soon

as the door is unlocked. The shunt time cancels when the specified time has elapsed, or when the door is closed. Regardless of the option selection, should the door be accessed (by card transaction or egress operation), but NOT opened, the shunt time will cancel upon the access time expiring.

NOTE [MicroLPM standard firmware must be version 1.9.4 or higher; or version 3.9.4 or higher, if Plus. The Maglock option is not supported in Plus MicroLPMs (version 2.X) or MicroELV (version 5.8.X) systems.]

All IQ and SIM panels support the Maglock option.

Reader Log If transactions at this particular reader are to be stored in memory and transmitted to the host, select this option.

Function The type of reader and its function is defined here. A standard access control reader would be defined as Access. The remainder of the selections pertains to the entry/exit features. Depending on Building, Department, or Parking entry/exit, the reader's function (IN, OUT, or IN/OUT), is defined.

Type Type refers to the card data format that will be accepted by the reader. Only one format per reader is available. Select the card data format that will be accepted by the reader from the following list:

Reader Function Options			
AccessIn	Access IN only	BldgIn	Building IN only
AccessOut	Access OUT only	BldgOut	Building OUT only
Access	Standard Access	BldgInOut	Building IN and OUT
ParkIn	Parking IN Only	DeptIn	Department IN only
ParkOut	Parking OUT Only	DeptOut	Department OUT only
ParkINOUT	Parking IN and OUT	DeptInOut	Department IN and OUT
		Elevator	Elevator Access

PIN_PAD	BP-250 or BP-270
ProTech (Hughes ID)	BR-350, BR-370, VR-670 (40-bit), All Hughes ID Proximity readers (except 26-bit cards)
ProTech (I)	PCSC ProTech Insert readers: BR-371, BR-351, and BR-352
ProTech/PIN-PAD	ProTech readers with PIN Pad (swipe readers)
ProTech/PIN-PAD (I)	ProTech Insert readers with PIN Pad
MagStripe	BR-450, BR-470
MagStripe (I)	BR-451, BR-452, BR-471
Watermark	Any Watermark card with the 12-digit format
PCSC Wiegand	34-bit PCSC Wiegand format. All Sensor Proximity readers
Indala	All Indala readers (32-bit)
Indala/PIN-PAD	All Indala readers w/PIN Pad
12-Digit	NO Site code; Magnetic stripe, BR-700
Sensor-26	Standard Sensor 26-bit format, VR-670 26-bit, HID 26-bit, BR700 BARCODE
Sensor-34	Standard Sensor 34-bit format
Special	Proprietary
PCSC-37	37-bit format
Corp-1000	Fortune 500 format
Corp-1000/PIN _PAD	Fortune 500 format w/PIN Pad
Motorola-32	Corporate Secure format
Motorola-32/PIN_PAD	Corporate Secure format w/PIN Pad

NOTE A letter or additional reference description that describes the reader type can follow the card technology:

PIN-PAD indicates a PIN Pad with reader. **(I)** indicates Insert Reader

Egress This connection selects the sense input number that is to control the Request to exit (egress) for this door. If the egress sense input for a door will be changed from the default, enter the available number (0, 16-39)**

Log Select this option, if you wish to write egress transactions into the hard disk for later report creation.

Normally Open Select this option if the Egress switch is a normally open (N.O.) contact.

Energize on Egress When selected, this option will energize the door strike when Request to exit is encountered. All other functions, such as Door Closed will still be monitored. Activation allows the relay to energize when egress is allowed.

****Egress Operation and Shunt Activation**

The Egress (unlock) time is linked to the Standard Shunt time parameter. While this link cannot be “de-associated”, adjusting the duration of the egress operation and its corresponding (Standard) shunt activation is programmable. When the egress input changes state (i.e., detects an egress operation), the door sense input is shunted. At the same instance, the external shunt output, if used, is engaged. Should the door be closed prior to the Standard Shunt time expiring, it will immediately cancel the shunt at the moment the door sense input detects a closed door. The external shunt output activation will also then terminate. Since an egress occurrence leads to a shunt occurrence, it might seem logical that subsequent egresses produce a renewed (lengthened) shunt activation. However, this is not the case. By design, when the shunt is active, the egress input is not monitored. Therefore, although subsequent egress could occur, the panel does not detect them. This is to ensure that upon a failure of an input device connected to the egress input of the panel, that the door sense is not permanently shunted. As a result of this, when there is an instance of a steady flow of traffic through a door, there is the possibility of a door ajar condition (door left open). This happens due to the fact that a steady flow of people is passing through the door and only the first person will generate the egress. However, the additional people do not generate an egress because the shunt is active. With the people continuously walking through, the door does not close. If the shunt time expires while people are still passing through, then the door ajar reading occurs. To prevent the door ajar condition from occurring during times of high traffic, it is recommended that the door sense input be programmed for automatic shunting by Time Period scheduling.

NOTE **MicroLPM Firmware Version 7.9.13** permits renewable shunt activation upon subsequent egress of authorized card transaction (when enabled via panel dipswitching)

As of the I**Q Series, Firmware 7.19.16** supports the renewable shunt feature.

As of the **SIM Series, Firmware 7.9.16** supports the renewable shunt feature.

Alarm Control

Output

This connection controls which output number the feature selected should operate (external shunt or local alarm).

Log

Select this option if output transactions are to be logged in the LiNC-NET journal.

External Shunt

This feature activates the associated open collector output during the door -open state. This option can be used to “shunt” other alarm systems attached to the door.

Local Alarm

Select this option if you wish to have an alarm annunciated at the door, to inform the user that an alarm message will be generated and sent to the host if the door is not closed. The open collector output defined by door output will be activated.

NOTES MicroLPM firmware level must be version 1.9.1 or higher. MicroLPM Plus firmware level must be version 2.6L or higher. MicroLPM Plus2 firmware level must be version 3.9.2 or higher). When selected, the Local Alarm options appear. Enter the duration of the alarm in seconds and the shunt time period of the alarm. The duration field specifies (in seconds) at what interval before the door shunt expires that the local alarm output will be initiated.

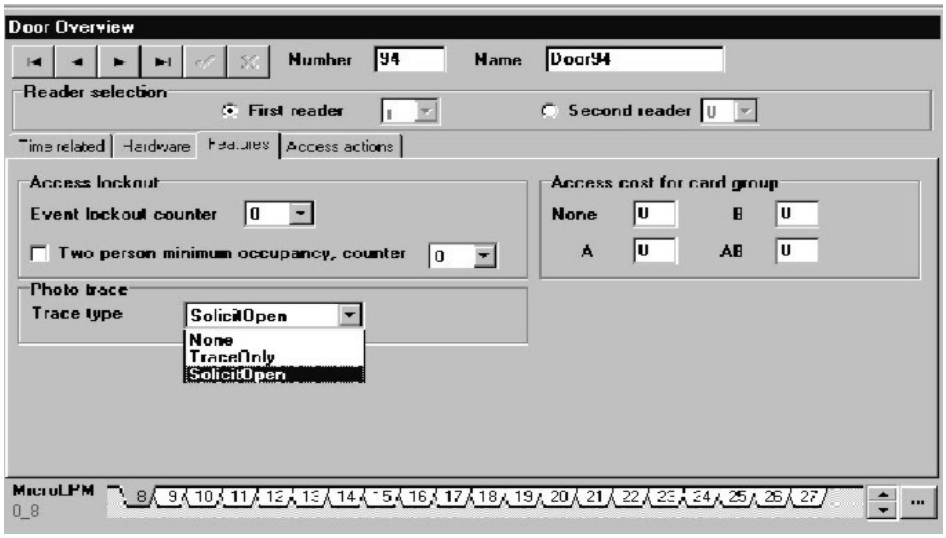
All IQ and SIM panels support the local alarm feature

Buzzer Off Upon ShuntTimer Expiration

Select this option if you wish to shut off the buzzer when the shunt timer expires. Not selecting this field causes the local alarm output to remain active until the door is closed.

Door Overview: Features

Select the panel and the reader to be updated (defined) with the radial button before updating those fields.



Access Cost for Card Group

Access Lockout

Panels support features that automatically deny access upon an event condition or when **Two-Person Minimum Occupancy** is in effect. **Event Lockout** is a feature that automatically denies access upon an event condition.

If **Event Lockout** is in effect, a cardholder that normally would be able to gain access is denied. A reader can be set into **Event Lockout** automatically through a card access, sense input, or by time of day. These conditions adjust the **Event Lockout** counter value and when the value is equal to or greater than the High Threshold, the reader is in **Event Lockout.**

NOTE **Event Lockout** only affects reader terminals. Egress operations are not defeated during an event lockout condition.

Event Lockout Counter

To enable Event Lockout counter for a reader:

1. Display the appropriate door in **Door Overview**.

2. Select the reader (**1st** or **2nd**).

3. Enter a counter number in the Event Lockout Counter field.

4. Define the event action that will modify the counter value. The **Event Lockout Counter Number** will be the threshold for denied access (**Event Lockout**). It will deny access to normally authorized cardholders in the event of an alarm within an area or when a parking lot is full. When the counter value reaches the selected value, normally authorized cards will be denied access. Conversely, when the counter value reaches its Lo value or lower, **Event Lockout** will be turned off, and normal access returns.

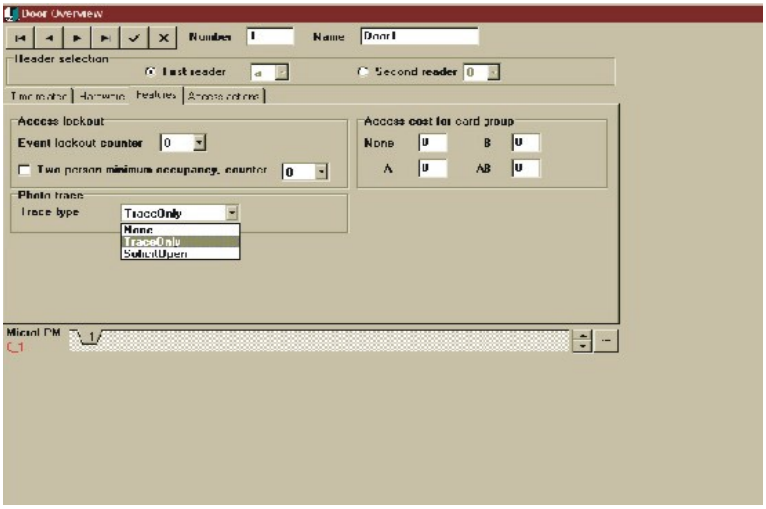


Photo Trace and Solicit Open

NOTE: When selecting standard access or long access, door access time is only applied. Shunt time isn't applied to the door sense.

Two-Person Minimum Occupancy Rule (TPMOR)

The panel can restrict access to a secured area by monitoring the number of people within that area. If no one is in the monitored area, the **two-person minimum occupancy rule (TPMOR)** feature requires two valid cardholders in order to gain access to that area. Once the area has the required two people, other valid cardholders will gain access without the need to enter or exit in pairs. The last two people are also required to exit together. This feature requires an IN and an OUT reader. When no one is in the area, and the first card is presented, the card reader IED will flash red/green for up to 6 seconds. During this time, the *second* card must be presented for TPMOR processing to be lifted.

Two-Person Minimum Ooccupancy Counter:

To enable TPMOR:

1. Display the appropriate door in **Door Overview.**
2. Select the **Two-Person Minimum Occupancy** box.
3. Enter the control counter number in the counter field. This option is used to count the number of people or cars within a room, area, or parking lot. If TPMOR is selected, the control counter number must be entered. When using the **Room Occupancy Counte**r, be sure to have at least one reader counting entries and another counting exits. This control counter should NOT be used for any other functions.

Output Outputs used by the TPMOR system must be configured with Low = Ø and High = 2.

Access Cost for Card Group The MicroLPM Plus series offers a feature that debits units from a cardholder's record. Debit can be determined by a reader and by a card group. Enter the number of units (0-999) to debit for each card group at this reader. Depending upon the number of credits issued to a card group; the Access cost for a card group will be subtracted from that balance. The system will subtract the value that was assigned for the card group as access cost for every valid transaction at a specified reader or readers (only designated readers) debits the card (account) status. See the **Change Card/Status** screen to allocate credits to a card account.

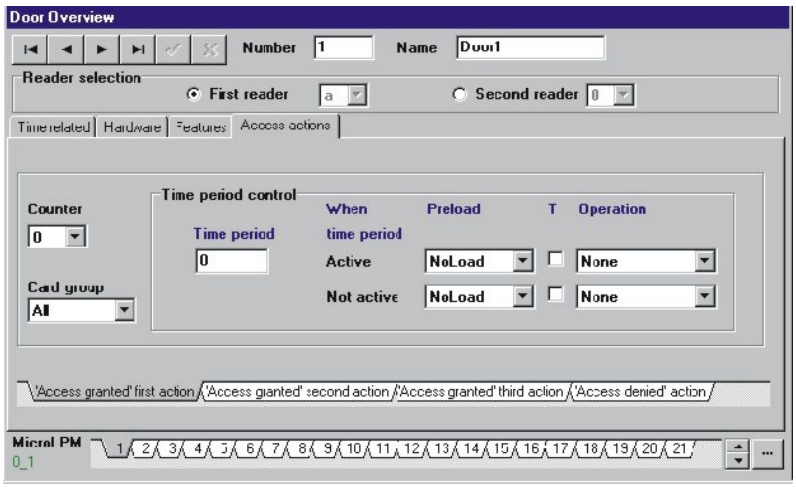
NOTE Depending on the panel MicroLPM firmware version, when toggling status for **In/Out** of doors, either an Authorized card or an Authorized card followed by a door open activation, will toggle In/Out status.

MicroLPM Firmware versions 1.9.7 and 7.9.7 or higher provide for an Authorized card *followed* by a **Door Open** to toggle In/Out status.

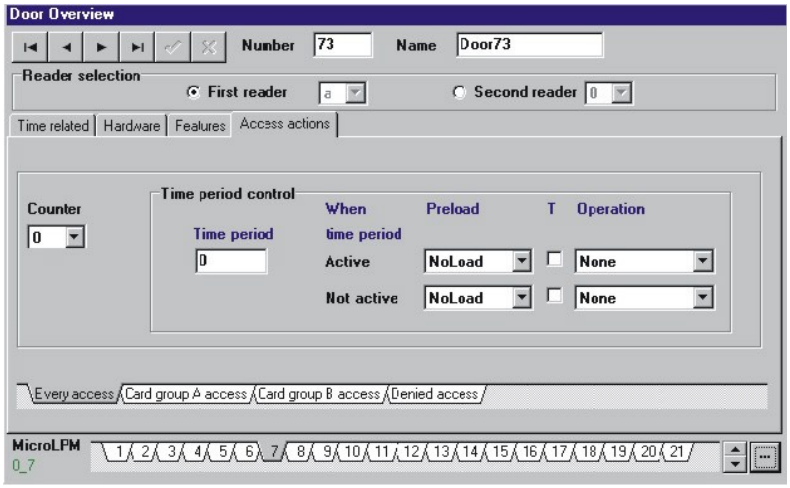
MicroLPM Firmware versions 1.96, 3.96, 5.96, or 7.96 or lower provides for an Authorized card ONLY to toggle In/Out status.

All IQ and SIM panels require the door to be opened prior to updating the card status.

Door Overview: Access Actions



Door Overview: Panel On-Line Plus or Panel Off-Line Plus/Standard



Door Overview: Panel On-line Standard

LiNC-NET provides output control via a card access or denial. The file tabs at the bottom of this screen will be different, depending on whether a standard MicroLPM or a MicroLPM-Plus controls your system. The screen above displays the MicroLPM-Plus panel. The number of outputs (control counters) that may be operated by a card transaction is dependent upon the panel type.

The **Card Group** programming influences the **action** performed when the card transaction takes place. For each possible card group, control may be determined by whether the card transaction occurs during (active) or not during (not active) a time period schedule. The output operation is determined by the card being authorized (access granted) or unauthorized (access denied) when presented to a specific reader. When using a *Standard* MicroLPM, the card group (**A**, **B**, or **AB**) will determine the output that is affected. This provides a unique output operation to be generated at the same reader, dependent on the Group of the card presented.

NOTE Cards of Group **AB** may influence two outputs since the operations under the Group **A** and the Group **B** file tabs are implemented for an authorized card of this group. The file tabs at the bottom will display: '**Every Access, Card Group A, Card Group B, and Denied Access.** When using a MicroLPM-Plus, the card Group (**A**, **B**, **AB**) or the Escorted (Escort Required) group will determine the output that is affected. This again provides for a unique output operation to be generated at the same reader, dependent on the group of the card presented. When an authorized card transaction occurs at a specific reader, the operations programmed under the **first action, second action, third action** may enable 3 outputs. Refer to the bottom file tabs in the panel above.

Reader Select the reader (a-l) that you wish to program. Enter a name to be associated with the panel and the reader or simply give it a Door number (example: Door#4).

Access Action Summary based upon Standard or Plus-type MicroLPM

Standard MicroLPM

Every Access- 1 additional output operation (plus door lock/ external shunt output activation). Regardless of Card Group.

Card Group A*- 1 additional output operation (plus the above defined Every Access operation) for cards who are defined as Card Group A.

Card Group B*- 1 additional output operation (plus the above defined Every Access operation) for cards who are defined as Card Group B.

Denied Access- 1 single output operation (no door lock/ external shunt output activation) regardless of the card's Group assign ment.

* For **Card Group AB** cards The Card Group A, Card Group B, and Every Access operations are activated upon the card being authorized.

NOTE When a card is not a **Card Group AB** card (**Card Group= None, Card Group A, or Card Group B**) then up to two additional output operations (plus **door lock/ external shunt** output activation) may be attained when the card is granted access. When a card is a Card Group AB card, then up to three additional output operations (plus **door lock/ external shunt output** activation) may be attained when the card is granted access.

MicroLPM Plus/IQ/SIM

Access Granted 1st Access- 1 additional output operation (if Card Group assigned to the card matches the Card Group assigned to this option) plus door lock/ external shunt output activation.

Access Granted 2nd Access- 1 additional output operation (if Card Group assigned to the card matches the Card Group assigned to this option) plus door lock/ external shunt output activation.

Access Granted 3rd Access- 1 additional output operation (if Card Group assigned to the card matches the Card Group assigned to this option) plus door lock/ external shunt output activation.

Access Denied Action- 1 additional output operation (if the Card Group assigned to the card matches the Card Group assignment to this option) but without door lock/ external shunt output activation.

NOTE When an authorized card's Group matches the Card Group assigned to either the 1st, 2nd or 3rd Access Granted actions then for each match, a separate output activation will occur. In addition, the door lock/ external shunt output activation) will occur. Because the Card Group assigned (to the Access Granted actions) may be either All, A, B, Escorted (defined below)-

Door Overview/Access Action Screen (Access Granted 1st, 2nd, 3rd, denied) Card Group Options

All	**Card Group A, B, AB**, and **None** as defined in the **Card Add/Change** screens
A	**Card Group A** as defined in the **Card Add/Change** screens.
B	**Card Group B** as defined in the **Card Add/Change** screens.
Escorted	**Card** of any class (**A, B, AB**, and **None**) but is defined as **Escort Required** in the **Card Add/Change** screens.

Access Action (at the Reader)

For normal access and Alternate access actions, control counter action is composed of **Time Period** priority option, **Preload** and **Operation**. Select from the following options:

Every Access or Access Granted /First action Select the first option Card Group access privileges from the options given. Enter All, if access will be granted fully at the reader, or A for one-way entry, or B for one-way exit, or Escorted, if an escort must accompany the cardholder.

Counter Enter the control counter number for the first option. Select from 0 40, A, B, C, D, or H (H class control counter is only available in Plus series).

Time Period Enter a timer period (2-31) for the access action. When time period Active and Not Active. Program the action that will take place when the time period is active and when it is not.

Preload Select the Preload action from the following options:

- **-NoLoad** No preload action (CC value is not changed)
- **-LoadZero** Load CC with zero
- **-LoadLow** Load CC with low threshold value
- **-AddPreset** Add preset value to CC
- **-LoadHigh** Load CC with high threshold value
- **-LoadMax** Load CC with maximum value
- **-FlipOutput** Load CC with zero or high threshold to flip output
- **-T** The system allows the user to override any other CC action and give priority to the time periods control operations. Define whether or not time period has priority. If non-zero value is assigned to the auto-unlock output, T flag will automatically be selected for the segment start.

Operation	Select the operation to be performed on the control counter from the following list:
-None	No Operation
-Decrement	Decrement CC
-DecrementSec	Start auto-decrement on second
-DecrementMin	Start auto-decrement on minute
-Clear	Clear auto increment decrement
-Increment	Increment CC
-IncrementSec	Start auto-increment on second
-Incremen tMin	Start auto-increment on minute
-OverrideTp	Override time period control
-TpSuspend	Suspend time period control (until (one ON cycle) restore)
-TpResume	Resume time period control

For 2nd action (Card **Group A** access), activate another Control Counter or a class of **Control Counters** with a valid access for a cardholder whose card is defined as **Card Group A** or **Card Group AB** at this reader:

1. Enter the control counter number (1-40) or group (**A**, **B**, **C**, or **D**).
2. Follow the previous steps for **Preload**, **Time Period**, and **Operation**.
3. For third action (**Card Group B** access), for cards defined as **Group B** or **AB**, follow the preceding instructions to initiate.

Access Denied (Denied Access)

A control counter action can be executed when a cardholder is denied access. The first group of entries (Time Period, Preload, T, Operation) defines the control counter action during an active Time Period card denial. The second set of entries describes what to do during the Access Denied Not active Time Period. If the Time Period control operations will override the Control Counter action, select “T” Field entry. Enter the control counter number (1-40) or control counter class (A, B, C, D) to initiate. Follow the identical procedure for the access granted counters above.

Hardware-Input

Be sure to select the panel number tab at the bottom of the screen. Select the sense-input number to be displayed or modified. The name for the sense input can be modified. Enter a name (up to 8 characters) to identify the sense input to the panel (example: Door1si4). Click on the check box after the selection and then click the arrow buttons to go forward or backward.

Input Number and Name — Enter the input number and select a name for the input (Door1, Door2, Door3, etc. are the default names given).

Assigned to Door — The door number is displayed if this input is assigned to a door.

Type — Sense input numbers 1-12 is used for reader detect. Sense input number 13: Tamper Detects for the panel. 14 and 15 are reserved for other purposes (In the IQ series panel, 14 is used as an alarm point. 16-71 may be assigned for one of the following purposes:

In the elevator series panels 72-119 are setup as Floor Button Sense Inputs

- **-Alarm** — Used to generate alarms
- **-Events** — Egress Sense
- **ConfigLN Setup-Input Switch** — Used when counting or using the input to trigger outputs without generating an alarm or real time transaction.

Floor Button — Elevator type panels

Elevator Control: — [Not available in this version]

Not in Use — Not being used

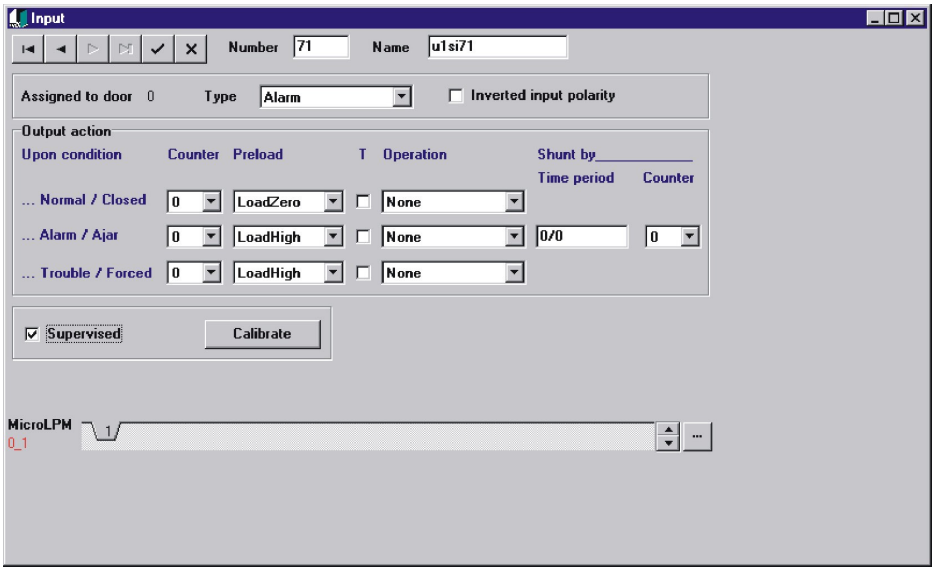
Output Action — Output action is defined by the fields Counter, Preload, T, and Operation. Counter is control counter number and Preload (Instruction to load a numeric value into the counter), T (Time Period does not have priority), and Operation (Instruction that acts upon the numeric value already loaded into the counter) define the counter action. Output action can be defined for each of the three conditions listed below.

Upon Condition

...Normally/Closed If defined as a dry contact alarm point, supervisory alarm point, or event. Control counter action will be performed upon going into normal status after an alarm condition. If defined as a door sense, control counter action will be executed upon detecting a door closure after a door alarm.

...Alarm/Ajar If defined as an alarm point, event, or egress, the control counter action will be performed upon an alarm. If defined as a door sense, control counter action will be performed when the door is left open longer than shunt time.

...Trouble/Forced If defined as a supervisory alarm, the control counter action will be performed upon detecting a short or open circuit trouble. If defined as a door sense, the control counter action will be performed upon an illegal entry through a doorway without first using an exit button or a card reader (Door forced open).



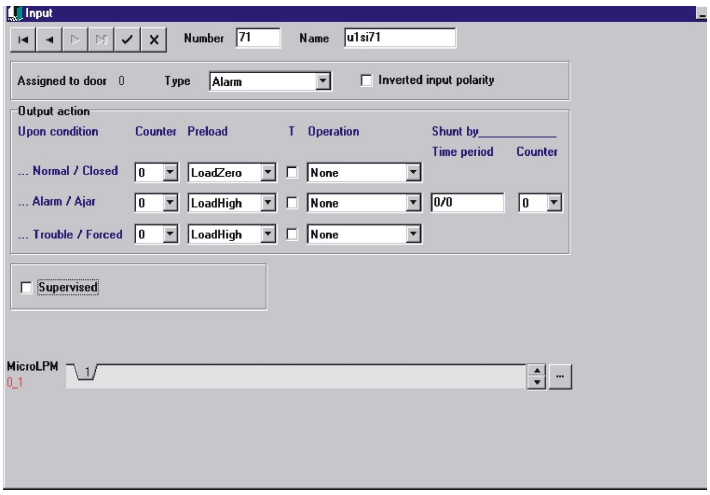
Input Screen with Calibration

NOTES

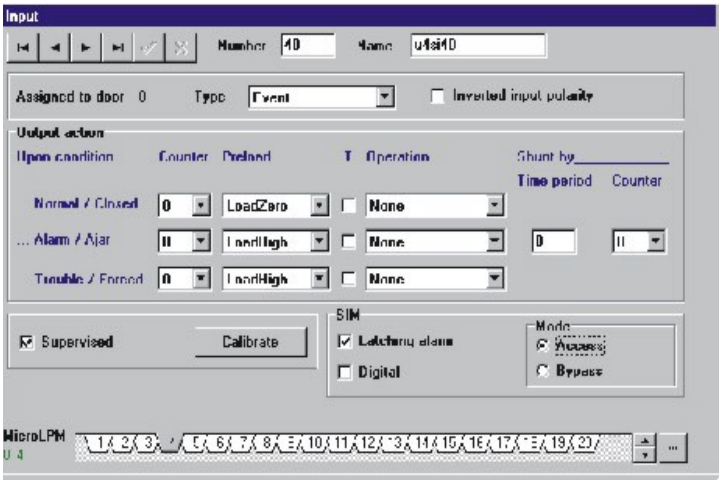
IQ, SIM, and ULTIMATE panels with 7.9.16 or higher only support the supervised point by point digital calibration.

Each individual sense input MUST be in normal state with 180/300 resistors and proper setup of inverted polarity, before calibration takes place.

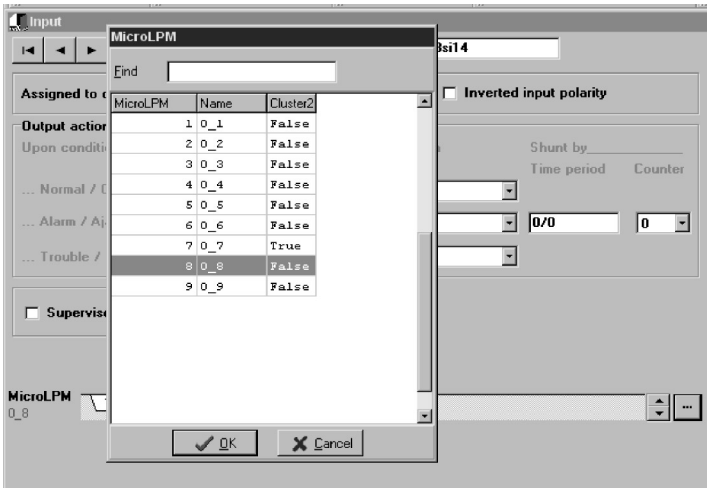
Notification that calibration took place is at LED of Panel will be OFF with corresponding Sense Input #.



Input Without Calibration



Input Screen- SIM



Pop-Up Screen

Shunt by Time Period, Shunt by Counter

Shunting an alarm condition may be done by time period or by control counter number or class. Under Time Period, enter the time period (1-31) which will shunt the alarm. At counter, enter the active control counter which will shunt the alarm (1-40, or counter class A, B, C, or D).

Enter the control counter number, which, upon an alarm condition, will activate or deactivate sense inputs. For Preloads, Time Period priority, and operations, select the from the following option instructions which load numeric values into the counter.

NoLoad	No preload action (CC value is not changed)
LoadZero	Load CC with zero
LoadLow	Load CC with low threshold value
LoadHigh	Load CC with high threshold value
LoadMax	Load CC with maximum value
AddPreset	Add preset value to CC.
FlipOutput	Load CC with low or high threshold to flip output
T	The system allows the user to override any other CC action and give priority to the Time Period's control operations. Define whether or not time period has priority. Enter an X if the Time Period does not have priority. If a non-zero value is assigned to the auto-unlock time period of a door lock output, T flag will automatically be selected for the segment start.

Operation

Select the operation to be performed on the control counter from the following list of instructions which act upon the numeric values already loaded into the counter:

None	No Operation
IncrementSec	Start auto-increment on second
Decrement	Decrement CC
IncrementMin	Start auto-increment on minute
DecrementSec	Start auto-decrement on second
Clear	Clear auto increment decrement
DecrementMin	Start auto-decrement on minute
Increment	Increment CC
OverrideTp	Override time period control (one ON cycle)
TpResume	Resume time period control
TpSuspend	`Suspend time period control (until restore)

Hardware-Output

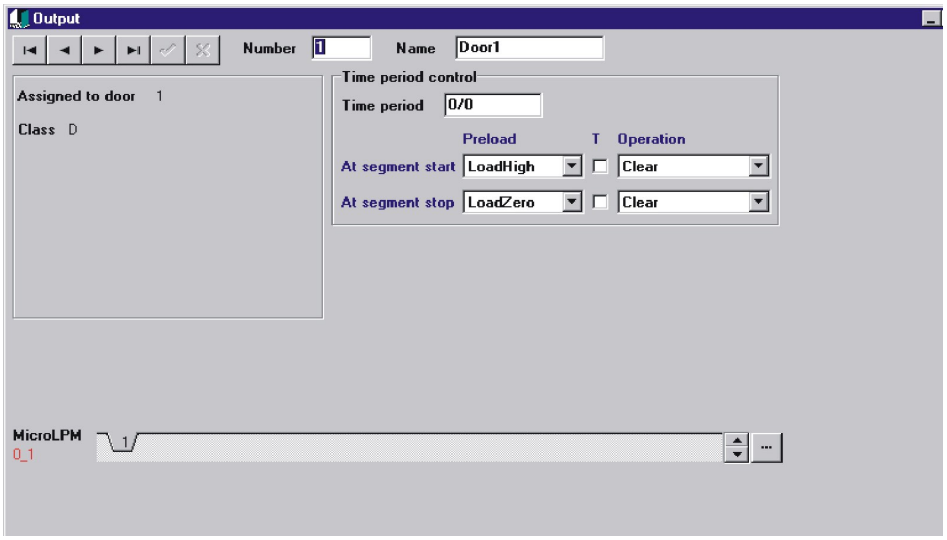
Be sure to select the panel number at the bottom of the screen. Enter a control counter number from the range of 1 through 40 (41 through 88 on MicroELV).

Select a name (up to 8 characters) which will identify the counter to the panel it will be associated with (example: Micro1cc12).

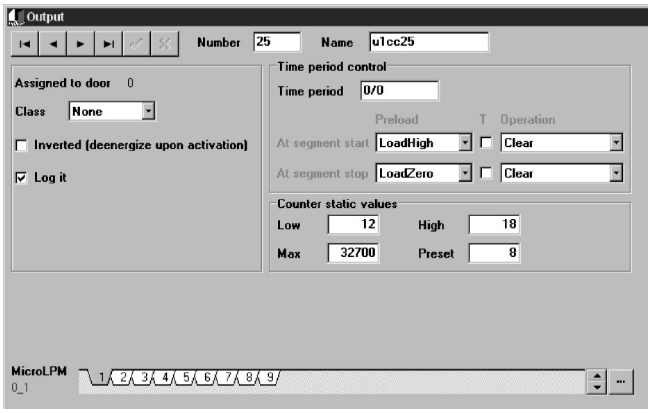
Assigned to Door — Door number is displayed if this control counter is assigned to a door.

Class — Control counters can be classified A through E. Class D and E are defined for door lock and external shunt, respectively. Counters are programmed as Class D and E from within the Door Overview hardware screen, Door Lock and Alarm Control output fields respectively. CLASSES A through C is user-assigned. They permit a single occurrence (sense-input violation or time period control) to actuate more than one counter at a time. Assign from the following options:

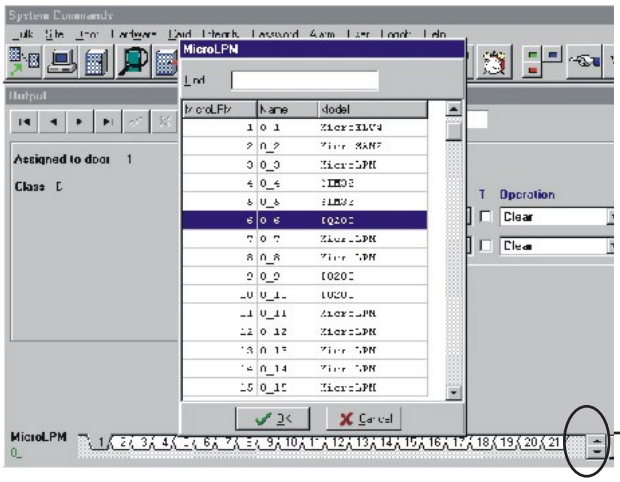
For Non-Door Outputs		For Door Outputs
A		D
B		AD
C		BD
AB	Or	ABD
AC		ABCD
BC		CD
ABC		ACD
		BCD



Door Output Screen



Output with Counter Static Values



Output with Pop-Up Screens

Time Period Control

Control counters can be affected by Time Period. Action can occur upon entry into the Time Period, as well as exiting it. Enter the Time Period by which door outputs will be activated or deactivated. The Time Period will cause the following prescribed actions to transpire: one upon entry (when the Time Period goes into effect) and one upon Exit (when the Time Period ends).

For example,

1. The time period 2 is entered, which may be the time from 8:00 to 17:00.
2. **LoadHi** is entered under **Preload** which would indicate that the control counter is loaded with the high value upon entyr (the beginning time).
3. **LoadZero** is entered for exit **Preload**, indicating a zero value load (the ending time).

Click on the **Search** button to be able to scroll to a different panel number.

The door functions (opening, in this case) are automatically overridden upon Time Period end with the entry of Clr under the **Operations** block. For **Preloads, Time Periods**, and **Operation**, select from the following options:

NoLoad	No preload action (CC value is not changed)
LoadZero	Load CC with zero
LoadLow	Load CC with low threshold value
LoadHigh	Load CC with high threshold value
LoadMax	Load CC with maximum value
AddPreset	Add preset value to CC
FlipOutput	Load CC with low or high threshold to oggle output
T	The system allows the user to override any other CC action and give priority to the time periods control operations. Define whether or not time period has priority. Enter an “X” if the Time Period does not have priority. If a non-zero value is assigned to the auto-unlock time period of a door lock output, T flag will automatically be selected for the segment start.

Operation Select the operation to be performed on the control counter from the following list:

None	No Operation
Decrement	Decrement CC
DecrementSec	Start auto-decrement on second
DecrementMin	Start auto-decrement on minute
Clear	Clear auto increment decrement
Increment	Increment CC
IncrementSec	Start auto-increment on second
IncrementMin	Start auto-increment on minute
OverrideTp	Override time period control (one ON cycle)
TpSuspend	Suspend time period control (until restore)
TpResume	Resume time period control

Class Control counters can be classified A through E. Class D and E are defined within the **Door Overview Hardware** screen for door lock and external shunt, respectively. CLASSES A through C are user-assigned. They permit a single occurrence (sense-input violation or card transaction) to actuate more than one counter at a time. Assign from the following options:

For Non-Door Outputs		For Door Outputs
A		D
B		AD
C		BD
AB	Or	ABD
AC		ABCD
BC		CD
ABC		ACD
		BCD

Log It If the transaction will be logged into the LiNC-NET journal, click on the box [X].

Time Period Control Control counters can be affected by Time Period. Action can occur upon entry into the Time Period, as well as exiting it. Enter the Time Period by which outputs will be activated or deactivated.

The Time Period will cause the following prescribed actions to transpire: one upon Entry (when the Time Period goes into effect) and one upon Exit (when the Time Period ends).

For example:

1. Time period 2 is entered, which may be the time from 08:00 to17:00.
2. **LoadHi** is entered under Preload which would indicate that the control counter is loaded with the high value upon entry (the beginning time).
3. **LoadZero** is entered for exit Preload, indicating a zero value load (the ending time). The door functions (opening, in this case) are automatically overridden upon Time Period end with the entry of **Clr** under the **Operations** block.

For **Preloads**, **Time Periods**, and **Operation**, select from the following options:

NoLoad	No preload action (CC value is not changed)
LoadZero	Load CC with zero
LoadLow	Load CC with low threshold value
LoadHigh	Load CC with high threshold value
LoadMax	Load CC with maximum value
FlipOutput	Load CC with low or high threshold to toggle output

T The system allows the user to override any other CC action and give priority to the time periods control operations. Define whether or not time period has priority. Enter an X if the Time Period does not have priority.

Operation Select the operation to be performed on the control counter from the following list:

None	No Operation
Decrement	Decrement CC
DecrementSec	Start auto-decrement on second
DecrementMin	Start auto-decrement on minute
Clear	Clear auto increment decrement
Increment	Increment CC
IncrementSec	Start auto-increment on second
IncrementMin	Start auto-increment on minute
OverrideTp	Override time period control (one ON cycle)
TpSuspend	Suspend time period control (until restore)
TpResume	Resume time period control

Counter Static Values After each operation, the counter value is compared to the **Counter Static Values (Low and High)**. The **Low** value is used to turn the defined output **OFF** and the **High** value is used to turn the output **ON**.

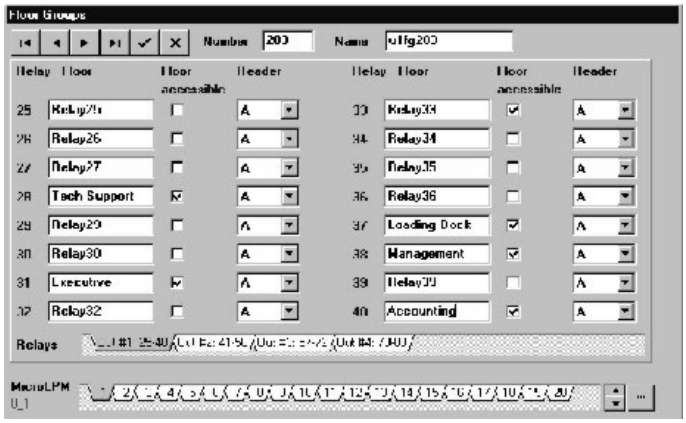
When a counter value is being incremented and equals the **High** value, the defined output will be activated.

When the counter value decrements, and the counter value equals the **Low** value, the output will be deactivated.

Low	Low Threshold. Deactivate the output when the counter reaches this value.
High	High Threshold. Activate the output when the counter reaches this value.
Max	Maximum value. Counter will not exceed this value. Max must be greater than or equal to the High value.
Preset	Preset value. A user-defined value that can be loaded into the counter

NOTE When using Elevator Control, the Low counter value should be 0 and the High counter value should be 2. Do NOT modify these values in an elevator panel.

Floor Groups (ELV)



Elevator control is defined as restricting access to specific floors in a building. The typical floor select panel interfaces to the elevator panel through a common ground system. Each push-button has a wire connected to the panel that carries the signal alerting the panel which floor was selected. The purpose of the **ELV** is to interrupt the signal from the push-button and the panel. When an authorized cardholder uses the system, the **ELV** allows the signal from the push-button to be received by the panel. The **ELV** restricts access to the floors by limiting a cardholder's choice of floors, in the elevator cab. The **ELV** is placed between the floor selection panel (push-button) in the elevator cab and the elevator panel. The **ELV** allows the elevator panel to receive only those selections of floors from the floor selection panel which the cardholder is authorized to access.

Typical operation of an **ELV** system is as follows:

1. The cardholder swipes/presents a card to the system via a cardreader (and/or PIN Pad).
2. The system determines which floors that the cardholder can access.
3. If the cardholder is authorized, the **ELV** allows the signals from the push-button to be processed.
4. The cardholder then selects the floor.
5. The elevator panel receives the message, controlling the cab to the desired (and authorized) floor.

> **NOTE** The cardholder is responsible for selecting only one floor. In addition, the panel can only monitor which floors a cardholder may select. It is not able to determine what floor was selected. Single floor latching with destination reporting is under development to prohibit multiple floors from being selected by a single card presentation.

An ELV system will activate all associated relays on command from the host computer. A predefined access time may be specified with a command. Relays are automatically deactivated after the access time has elapsed.

The ELV operates in a fail-safe mode. The "secure" state of the relay is energized. If the ELV malfunctions or loses power, the relays de-energize and control is reverted to the push-button panel.

An ELV system requires the following setup:

1. In the **ConfigLN** program, under the **Main** tab, select **[ ] MicroLPM ELV** in use located under **Miscellaneous**. See the section on "Initialization Setup for LiNC-NET for Windows".

2. MicroLPM Hardware Setup: ELV must be selected in the expansion boards group.

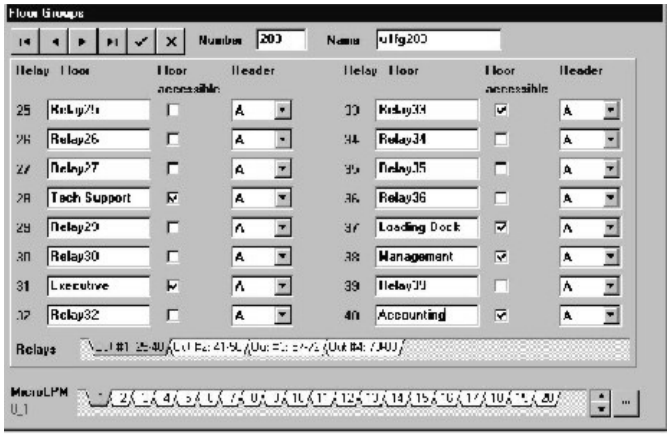
3. Door Overview Hardware Options: Select Elevator as the reader function for the readers used in the ELV system.

4. Output: Outputs used by the ELV system must be configured with Low = 0 and High = 2.

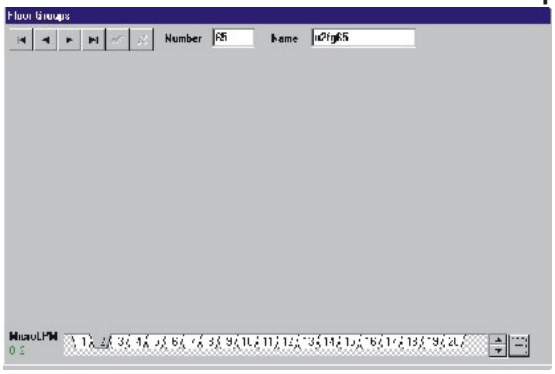
5. Floor Group: Make relay to reader assignments and define floor groups that will define access for cards.

6. Card Definition: A card can have up to four time period/floor group pairs to define the elevator access. In addition, the card must have access at the elevator reader. This is defined in the Authorization Group menu screen.

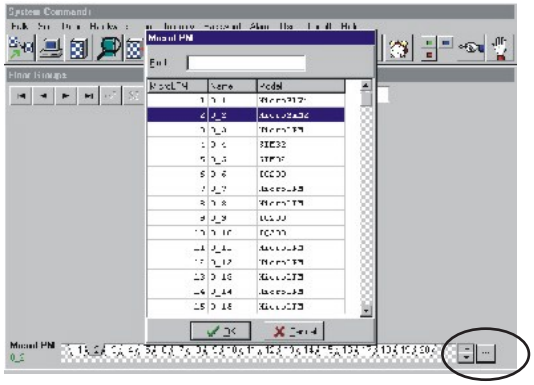
Floor groups define the groups of relays that are used to define access for each card for an ELV system. Care must be taken in defining floor groups for a system with multiple ELVs because each ELV has its own set of floor groups but all ELVs use identical card records containing the same time period/floor group pairs and identical time period records.



Floor Groups Pop-Up Screen



Floor Group screen is blank when panel is NOT defined as an elevator-type controller in the MicroLPM Setup/Hardware screen.



Click on the **Search** button to scroll to another panel that is defined as Micro-Elevator type controller

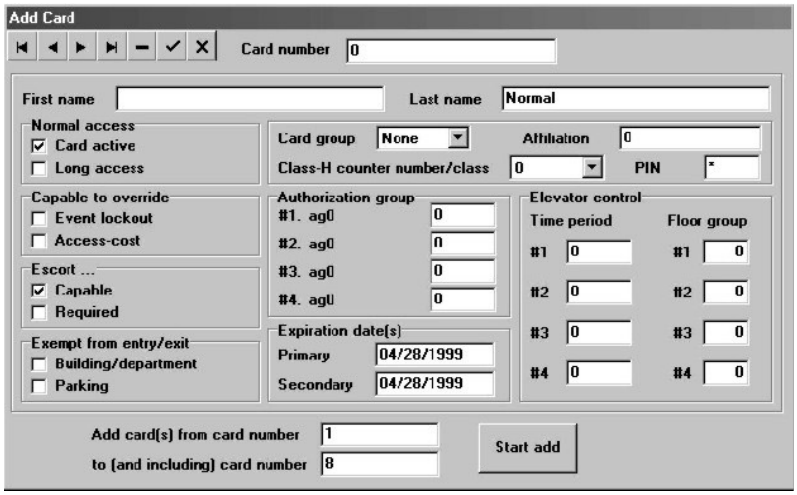
Field Definitions

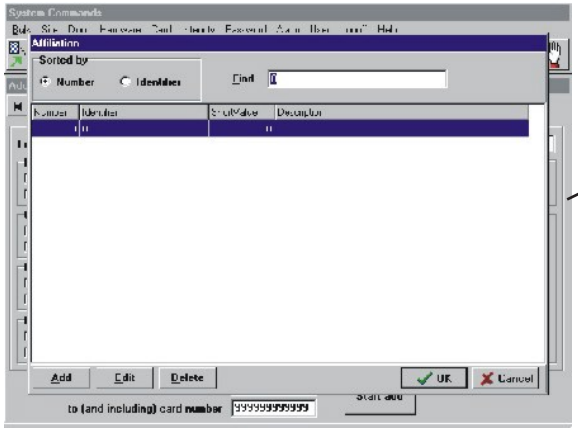
Number	Enter the number of the Floor group to be displayed or modified.
Name	The name for the current floor group is displayed and can be modified.
Relay	This column displays the relay numbers. The range of relays shown is dependent on the Output board selected.
Output #1	Relays **25** through **40** - Available in **MicroELV4**, **ELV3**, **ELV2**, and **ELV1**
Output #2	Relays **41** through **56** - Available in **MicroELV4**, **ELV3**, and **ELV2**
Output #3	Relays **57** through **72** - Available in **MicroELV4** and **ELV3**
Output #4	Relays **73** through **88** - Available in **MicroELV4**
Floor	A short text may be entered in this field to identify the relay. This field can be updated from any floor group. Changes made in one floor group will be reflected in every other floor group of that panel.
Floor Accessible	These fields define the floor group. A check in this field indicates that the floor connected to that relay is accessible to the cards that use this floor group. This includes the same relay in different floor groups being possible (and is often done) as different cards, activate different combinations of relays (floor groups) when presented to an “Elevator” (function) reader and access is granted.
Reader	This field shows to which reader, if any, the relay is assigned. This field can be updated from any floor group. There is one set of relay to reader assignment for each panel, and changes made in one floor group will be reflected in every other floor group of that panel. There is a 4-Reader max on any elevator system.
Relays	Select one of the Output boards. Because one relay is wired to one floor select button of a particular elevator cab, it is not possible to assign more than one reader to control a relay. However, any number (1-64) of relay outputs (25-88) may be controlled by a single reader.
MicroLPM	Select the panel number. The name of the panel is displayed in the field located in the lower left corner of the screen, to the left of the tabs.

Card

Add Card

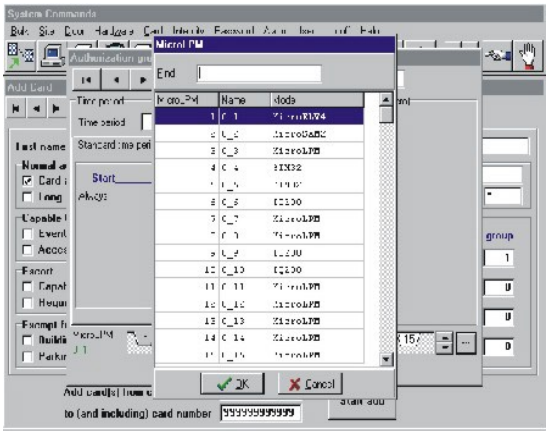
Card information to grant access to a cardholder is user-defined. The user allows the cardholder to enter or exit a facility by defining **Card** parameters. As a minimum requirement **Card Active, Authorization Group**, **PIN,** and **Expiration Date** must be entered. The user can also enter personal information for the cardholders. Refer to **Cardholders Personal Data.**



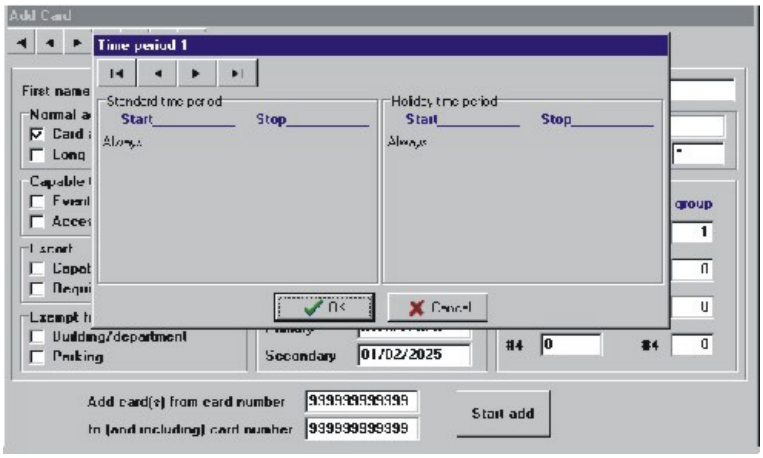


Click on the **Affiiliation Field's Search** button to scroll through, add, and delete affiliations and click on the OK button to assign this affiliation to the card reader.

Click on the **Authorization Group's Search** button to display this display screen. Use the display screen to scroll to a different panel and click the **OK** button to include it in the cards Authorization Group.



Tab to the Elevator's Time Period field and click on its **Scroll** button to display or reassign another Time Period to the Card.



Adding a Card

Enter the card number in the Card number block. Enter a name of a cardholder*

NOTE Card numbers can be assigned from 1 to 65,000. The total number of cards assigned is dependent upon the memory card(s) and firmware version in your panel system. Under Normal access conditions, check the Card active box to activate the card. If a person requires extended access time through a doorway, select the Long access box.

Capable of Override

LiNC-NET provides a feature to disable access upon an event or alarm condition. If the user is allowed to override this condition, select this option. If the cardholder is to have this override capability, click on the Event lockout box.

Access-Cost

The ability to override the cost/debit criteria. If the cardholder is to have this override capability, click on the Access-cost box.

Escort Capable

Ability to grant access to a cardholder that has the escort required attribute.

Escort Required

The holder must be accompanied by a cardholder that has the escort capable attribute. A cardholder may have both capable and required attributes, but always require a second unique cardholder with a capable attribute to gain access. If the cardholder can be assigned as an **Escort,** check **Capable**. If the cardholder must be escorted, select **Required**.

Exempt from EntryExit (Anti-Passback)

LiNC-NET supports 3 levels of Entry/Exit enforce ment: Parking, Building, and Department. The cardholder's Entry/Exit status and the function type of the access reader determine Entry/Exit decisions. A reader is assigned an Entry/Exit function. The termi nal type (Parking, Building, or Department access) determines the function. Each terminal type where anti-passback is to be enforced has an Entry/Exit direction associated with it (In or Out).

Building In/Out, Department In/Out and Parking In/Out type readers do permit a single reader to be used for anti-passback enforcement but are not practical. This is because in order for the system to keep track of the cardholders true whereabouts, the cardholder must be relied upon to always use the card reader whenever arriving/departing.

Because this single reader must be oriented in a location accessible to the entrance and exit, the customary physical restrictions prohibiting the omission of reader use are usually eliminated. Thus, if the cardholder forgets to use the reader each time they pass through the checkpoint, they will compromise the systems integrity. Therefore, it is recommended that two readers always be used (one on each side of the door) when using anti-passlock.

When an Entry/Exit reader reads a card, the system checks the cardholder's In/Out status with the terminal type. The status of the cardholder must be OPPOSITE of the Terminal type (e.g., in order that a cardholder is granted entrance, his status must be OUT and vice-versa).

NOTE Anti-passback is NOT enforced system wide and therefore, all anti-passback terminals must reside on the SAME panel.

Example If a card is presented to a **Bldg In** (Building In) reader, the cardholder's Bldg status must be OUT prior to use. That is to say, that he cannot be in the building and attempt to get back in again. The feature stops the "passback" of cards. LiNC-NET can be programmed to ignore or bypass the Entry/Exit logic to specific cardholders by setting the individual entry/exit exemption status. If the cardholder does not follow the Entry/Exit logic, access status will be one of the following:

1. Always denied access (when strict anti-passback is selected in the panel setup) and a possible alarm and logger message will be generated.

2. A single violation ONLY is allowed (when lenient anti-passback is selected in the panel setup) and a possible alarm and logger message will be generated.

3. Always ALLOWED access (when soft anti-passback is selected in the panel setup) and generates a logger message and, a possible alarm

Building/Department The cardholder with this attribute can go against the entry/exit criteria for building or department type readers.

Park The cardholder with this attribute does not have to comply with the entry/exit criteria of parking type readers. If the cardholder is Exempt from entry/exit restrictions for Building/department or Parking, check the appropriate box.

There are 4 classes of cards that a cardholder may be assigned to: **No group, Group A, Group B**, and **Group A** and **Group B**. Card groups are used to activate different outputs at the same reader or used to provide counting by the different groups. Enter the Card group: **A, B, AB,** or **None**.

Class-H Counter NumberClass This resource permits allocation of a specific output (called Class-H counters [1-40]) to be controlled by a specified card when presented to any number of specified readers. Define the counter number or class for counter Class-H during terminal access. (For MicroLPM-Plus panels only.)

PIN The PIN (Personal Identification Number) field allows the operator to assign a 4-digit number to a cardholder. The PIN is “encrypted” (****) in the data files so that other programs are unable to view them. Hence, the passwords and PIN codes are NOT displayed. This PIN must be used when entering through a door that includes a reader and PIN pad. The PIN can be entered before or after presenting the card.

NOTE A **Duress Code** can be derived from the Normal PIN code by incrementing the first and second digits by “one”. If the first and second Regular PIN digit is a 9, the duress code digit is calculated as a 0. Duress can only be initiated from a cardreader with PIN Pad, not from a PIN only terminal.)

Example of a **Duress** Code assignment:
Regular PIN = **3219**
Duress Code would be: **4319**

Regular PIN = **1999**
Duress Code would be: **2099**

Do NOT assign user-defined PINs **0000**, **0911** and **9811**, as they are reserved by the system.

Authorization Group Assign the authorization group number (1 - 2000) that describes the authorization level for the cardholder. An authorization group is a valid list of readers and the time period that the cardholder can gain access. Enter a second, third, or fourth Authorization group number if applicable.

NOTE A **MicroLPM-Plus4** is required to specify the third and fourth authorization groups (Firmware version 7.9.X must be installed in the MicroLPM & PLUS4 enabled in INI file). In theConfigLN program from the Main tab under Miscellaneous, select **Plus4**. See the section on Initialization **Setup for LiNC-NET for Windows**.

Expiration Date(s) The card will be denied access from the end of the expiration date. LiNC-NET can support two expiration dates:

Primary and Secondary- Primary expiration If you have previously selected **Global** (in panel setup- card table format =**Park/Global**), the system uses the **Primary Expiration Date** for all types of readers. You must select Global if user-select PIN is to be used.

If you select **Park-Only**, each cardholder has **2 card expiration** dates. One date controls the access privilege for parking type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.

Elevator Control the card will be able to access floors defined by the floor groups during the corresponding Time Periods. Enter the time period **(0-999)** which will enable the cardholder to access the corresponding floor group. (ELV must be enabled in the ConfigLN program)

At the **Start Add** block, enter the number of the cardholder that you wish to add in the from block. If there is more than one addition, enter the ending number in the to block below. If only adding a single card, enter the same number in both the **from** and **to** boxes.

*CardFile: Variable Length Field Sizes for First and Last Names

Modifying the field length in the default path **C:\Program Files\PCSC\LiNC-NET version 5.11.2** folder can expand the fields for **Card First Name** and **Last Name**. Click on the **ZCAfield.DAT** file. This file contains two columns. The first column indicates the size of the filed. The second column contains a comment indicating the field for which the size is intended. The order of the fields is critical. For First name (standard 32 characters) see **zFirstName**. For Last name (standard 32 characters), see **zLastName.**

32	**zFirstName**
32	**zLastName**
10	**zCaEmpNo**
10	**zCaCompany**
10	**zCaDept**
10	**zCaDiv**
10	**zCaRegion**
10	**zCaSite**
10	**zCaCarMake**
10	**zCaCarModel**
20	**zCaCarUse**
4	**zCaCarYear**
10	**zCaCitizen**
10	**zCaColor**
5	**zCaDependents**
10	**zCaHeight**
5	**zCaMarital**
5	**zCaSex**
10	**zCaSSN**
10	**zCaWeight**
10	**zCaWhoRel**
20	**zCaCity**
20	**zCaStreet**
20	**zCaTelNo**

To Change the Size of a Field

Use a text editor such as NotePad© or Microsoft Word© to change the integer corresponding to the filed. Care should be taken in describing the field sizes. The size of each record is affected by the size of its components (i.e., fields). Having too many large fields could degrade the overall performance of LiNC-NET.

1. The Create DataBase program must be launched after each change in ZCAfield.DAT.
2. Select the MicroLPM tab and scan all panels.
3. Select the Files tab and select All files.
4. Select the Reorg tab and select Reorg to reorganize all LincnetNT data files.
5. Select the LiNC-NET icon to launch the LincnetNT program.
6. Verify that the changes have taken effect in the Card names fields in Card Add.

Changing Cards - C for Change

LiNC-NET offers a feature that allows bulk card changes. On the **Change Card** form a check box precedes each data field:

Example- **Card Active.**

These check boxes are used to select the field(s) that will be affected once the bulk change is initiated.

NOTE Card numbers can be assigned from 1 to 65,000. The total number of cards assigned is dependent upon the size of the memory card and the firmware version installed in your panels.

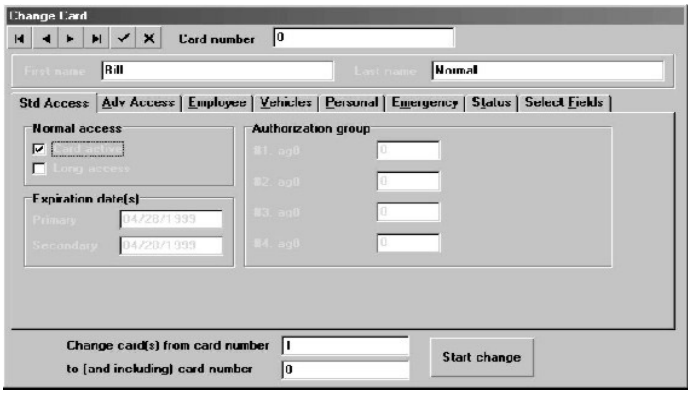
Changing a Card Enter the card number in the Card number block. To change a card name, highlight the name of the cardholder and then enter the new name. *

Change Card: Standard Access

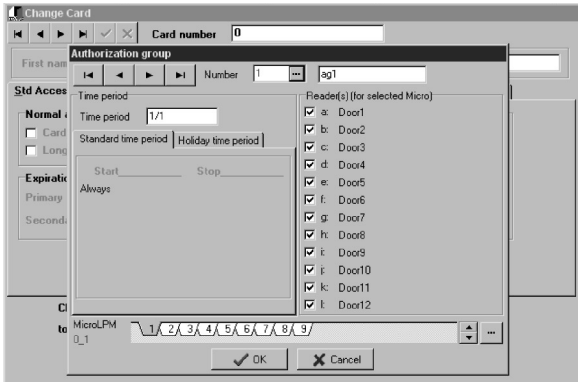
Normal Access

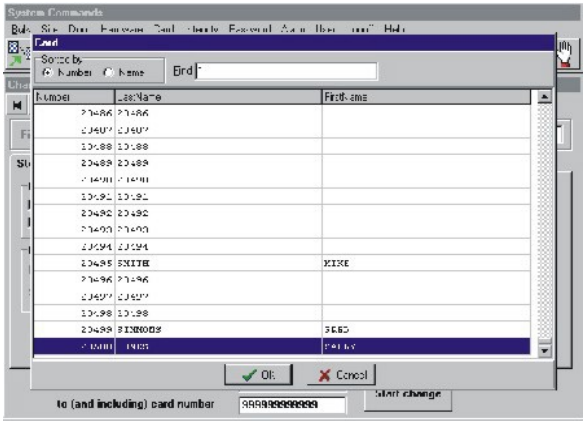
Card Active Indicates whether the card is active or inactive.

Long Access Access time is the time a door lock is energized. There are 2 access timers for each door lock: **Normal** and **Long**. The choice of which timer to be used will be determined by the cardholder's Long attribute. If a person requires longer access time, choose **Long Access**; leave blank, if normal access is adequate.



Tab to the **Authorization Group** field and click on the **Scroll** button to display or change the Authorization Group assigned to the Card. Once complete, click on the **OK** button to assign this to the Card.





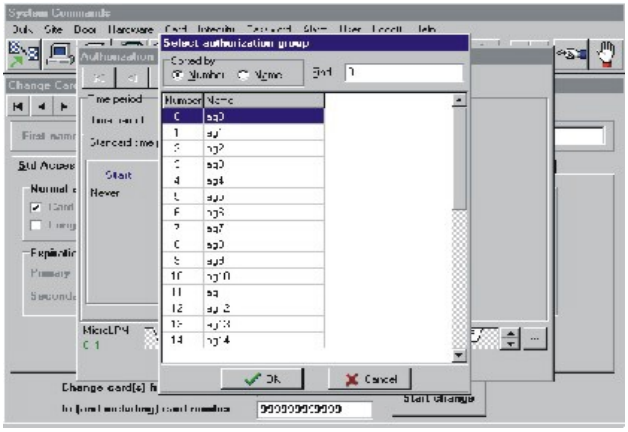
Tab to the **Card Number** field and click on the **Scroll** button and highlight another card. Then click on the **OK** button to display the *new* Card record.

Expiration Date(s) The card will be denied access from the end of the expiration date. LiNC-NET can support two expiration dates:

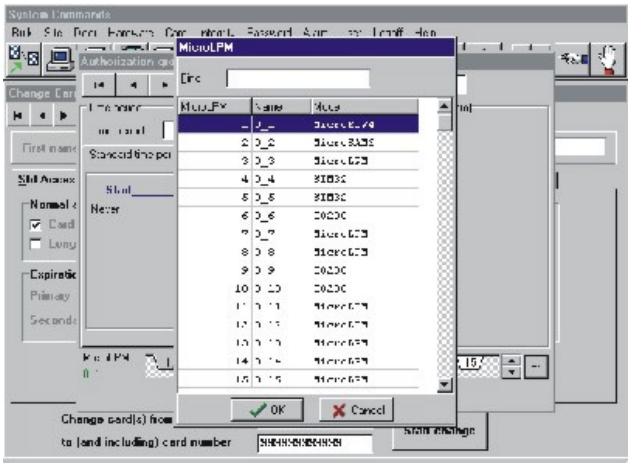
Primary and Secondary Expiration

If you have previously selected Global (in MicroLPM setup- card table format = Park/Global), the system uses the Primary expiration date for all types of readers. You must select Global if user-select PIN is to be used.

If you select Park-only, each cardholder has 2 card expiration dates. One date controls the access privilege for parking type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.



Click on the **Search** button within the **Authorization Group** to scroll through all the existing groups. After highlighting the desired **Authorization Group**, click on the **OK** button to change to a different **Authorization Group**.



Click on the **Search** button within the **Authorization Group** to scroll to a different panel. Click **OK** to include it in the **Authorization Group** being deleted.

Authorization Group Assign the authorization group number (1-2000) that describes the authorization level for the cardholder. An authorization group is a valid list of readers at various panels and the time period that the cardholder can gain access. Enter a second, third, or fourth authorization group number if applicable.

NOTE A **MicroLPM-Plus4** is required to specify the third and fourth authorization groups. PLUS4 must be entered in the LINCETW.INI file in order for the 3rd and 4th Ags to display. In the ConfigLN program from the Main tab under Miscellaneous, slesct **Plus4**. See the section on **"Initialization Setup for LiNC-NET for Windows".**

Change Card: Advanced Access

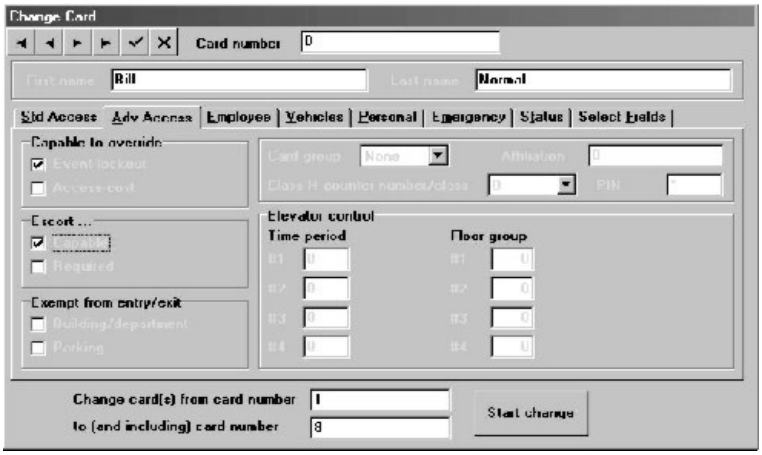
Capable to Override-

Event Lockout LiNC-NET provides a feature to disable access upon an event or alarm condition. If the user is allowed to override this condition, select this option.

Access-Cost The ability to override the cost/debit criteria.

Escort Capable Ability to grant access to a cardholder that is accompanying a cardholder that has the escort required attribute.

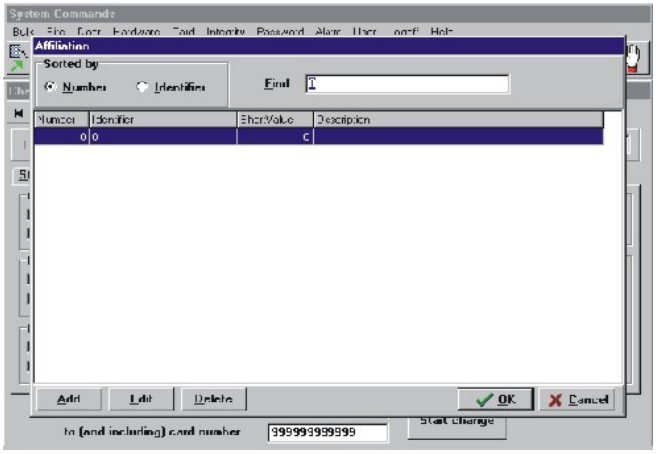
Escort Required The holder must be accompanied by a cardholder that has the escort capable attribute. A cardholder may have both capable and required attributes, but will always require a second unique cardholder with a capable attribute to gain access. If the cardholder can be assigned as an **Escort**, check **Capable**. If the cardholder must be escorted, select Required. The Escort resource (Capable/Required) is enforced at ALL readers of ALL panels and cannot be segregated.

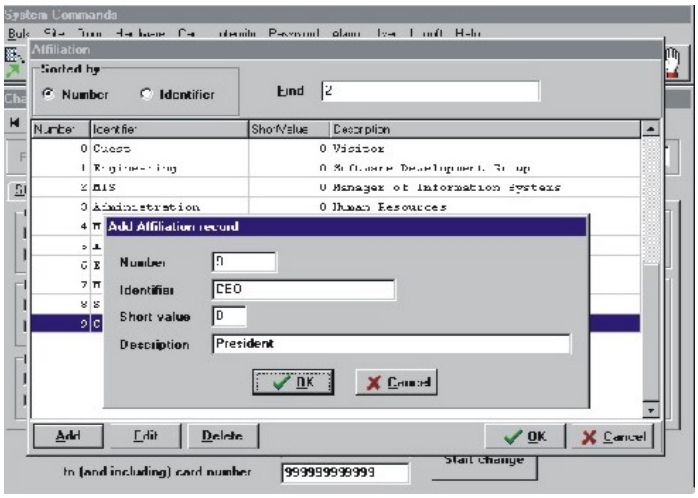


Tab to the Affiliation Field and click on the Search button to display all existing affiliations. Click on the :

- **Add** button to create another affiliiation(see below).
- **Delete** button to remove the highlighted affiliation.
- **Edit** button to modify an existing affiliation.

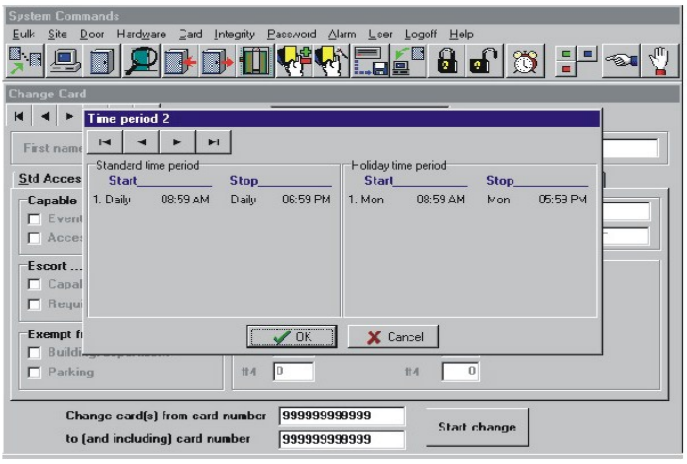
Click on the **OK** button to assign the highlighted affiliation to the current card record.





Adding an Affiliation Record

1. Click on the **Add** button to create a *new* affiliation,
2. Complete all information in the **Add Affiliation** box.
3. Click on the **OK** button to finish defining this affiliation.



Exempt from Entry/Exit

LiNC-NET supports 3 levels of **Entry/Exit** enforcement: **Parking, Building,** and **Department**. **The cardholder's Entry/Exit status and the function type of the access reader determine Entry/Exit decisions.** A reader is assigned an **Entry/Exit** function. The terminal type (Parking, Building, or Department access) determines the function. Each terminal type has an **Entry/Exit** direction associated with it (**In** or **Out**). **Building In/Out, Department In/Out** and **Parking In/Out** readers cannot provide anti-passback, as the system cannot track the cardholder as being **In** or **Out** when they are authorized for access. When an **Entry/Exit** reader reads a card, the system checks the cardholder's **In/Out** status with the terminal type. The status of the cardholder must be OPPOSITE of the Terminal type (e.g., in order that a cardholder is granted entrance, his status must be OUT and vice-versa).

Example If a card is presented to a **Bldg In** (Building In) reader, the cardholder's **Bldg** status must be **OUT** prior to use. That is to say, that he cannot be in the building and attempt to get back in again. The feature stops the "passback" of cards. LiNC-NET can be programmed to ignore or bypass the **Entry/Exit** logic to specific cardholders by setting the individual **Entry/Exit** exemption status. If the cardholder does not follow the **Entry/Exit** logic, access status will be one of the following:

1. Always denied access (when strict anti-passback is selected in the panel setup) and a possible alarm and logger message will be generated.
2. A single violation ONLY is allowed

(when lenient anti-passback is selected in the panel setup) and a possible alarm and logger message will be generated.

3. Always ALLOWED access (when soft anti-passback is selected in the panel setup) and generates a logger message and, a possible alarm.

Building/Department The cardholder with this attribute can go against the entry/exit criteria for building or department type readers.

Park The cardholder with this attribute does not have to comply with the entry/exit criteria of parking type readers. If the cardholder is Exempt from entry/exit restrictions for Building /department or Parking check the appropriate box.

There are 4 classes of cards that a cardholder may be assigned to: **No Group**, **Group A**, **Group B**, and **Group A and Group B**. Card group/class is used to activate different outputs or used to provide counting by the different groups. Enter the Card group: **A, B, AB,** or **None**.

Class-H Counter Number/Class This feature permits allocation of a specific output (called Class-H counters [1-40]) to be controlled by a specified card when presented to any number of specified readers. Define the counter number or class for counter Class-H during terminal access. (For MicroLPM-Plus panels only.)

PIN The **PIN (Personal Identification Number)** field allows the operator to assign a 4-digit number to a cardholder. The PIN is "encrypted" (****) in the data files so that other programs are unable to view them. Hence, the passwords and PIN codes are NOT displayed. This PIN must be used when entering through a door that includes a reader and PIN pad. The PIN can be entered before or after presenting the card.

NOTE A **Duress Code** can be derived from the Normal PIN code by incrementing the first and second digits by "one". If the first and second Regular PIN digit is a 9, the duress code digit is calculated as a 0. **Duress** can only be initiated from a cardreader with PIN Pad, not from a PIN only terminal.)

Example of a **Duress Code** assignment:

Regular PIN = **3219** Duress Code would be: **4319**
Regular PIN = **1999** Duress Code would be: **2099**

Do NOT assign user-defined PINs 0000, 0911 and 9811, as they are reserved by the system.

Elevator Control

The card will be able to access floors defined by the floor groups during the corresponding Time Periods. Change to the time period (1-31) which will enable the cardholder to access up to 4 corresponding floor groups. To make bulk card changes:

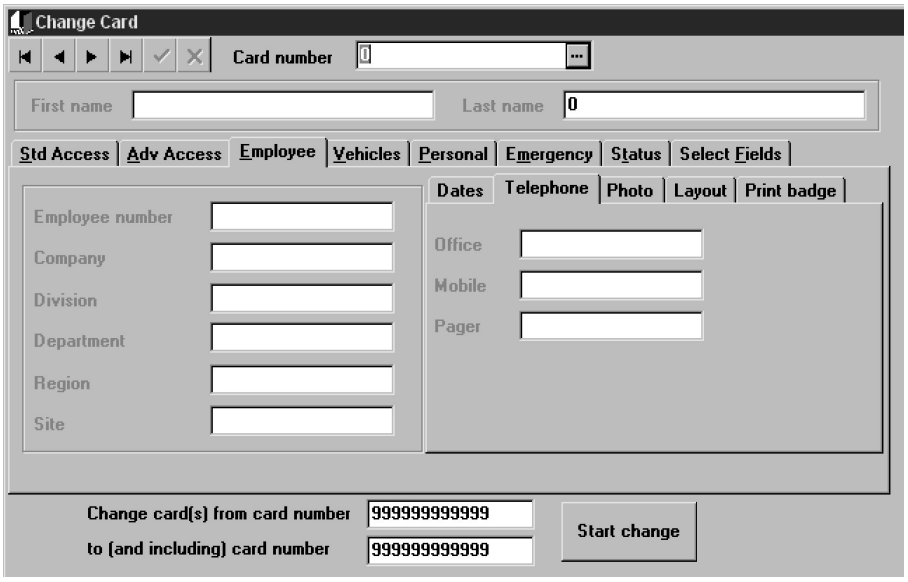
1. For each data field to be changed, position the icon on the field name (in gray text). Push the right mouse button to select this field for bulk change (in black text). Refer to **Add Card** definitions (Administrator Guide) for the field descriptions.

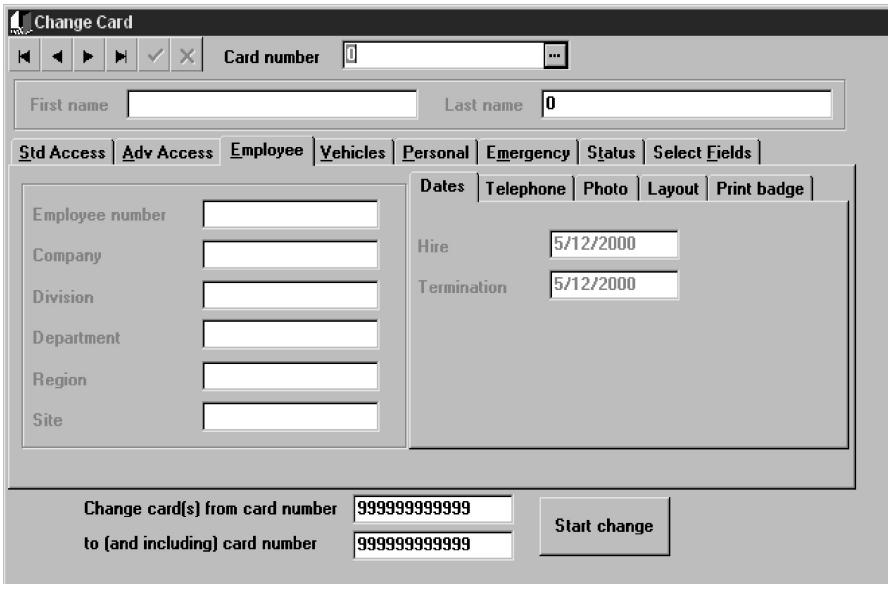
2. Type in the card range to be changed by setting the **from** and **to** fields with the first and last card numbers.

3. Press **Enter** and then select the **Start** bulk change button.

Change Card: Employee

Entering employee personal information is optional, as it does not affect access control operations. The Employee form contains data fields for the following information organized on four screens.

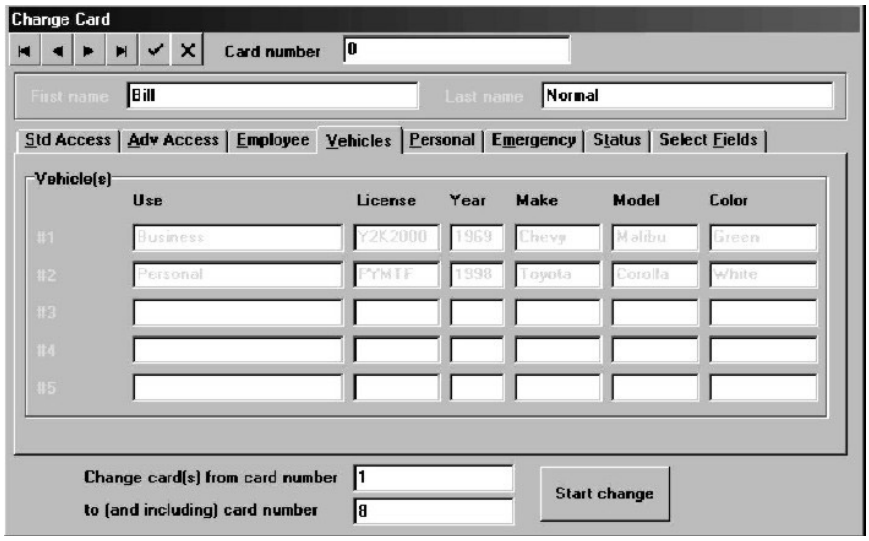




Employee Page- Click on Employee File Tab

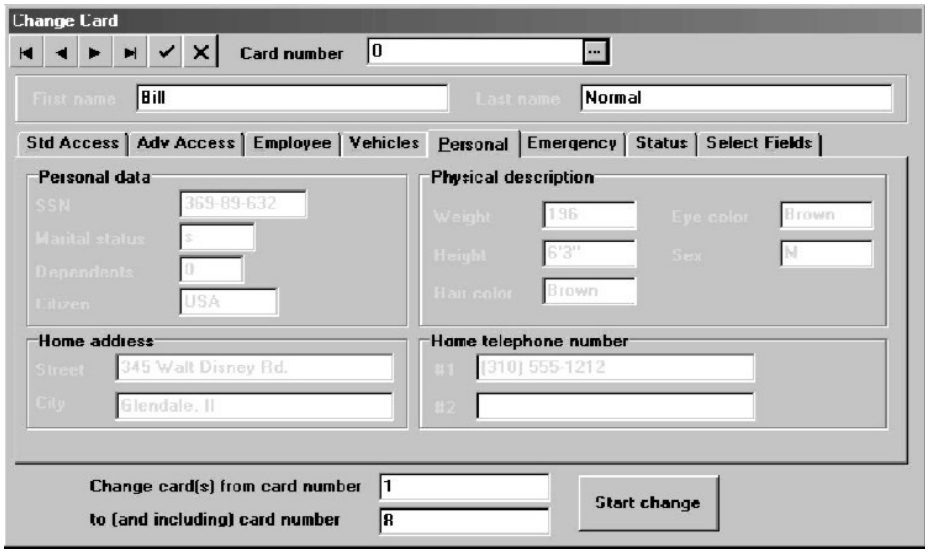
Change Card: Vehicles

Click on **Vehicles** file-tab. It contains the following fields for five cardholder vehicles.



License	10 characters
Make	10 characters
Model	10 characters
Year	4 characters
Color	10 characters
Use	20 characters

Change Card: Personal



Click on the **Personal** page file tab.

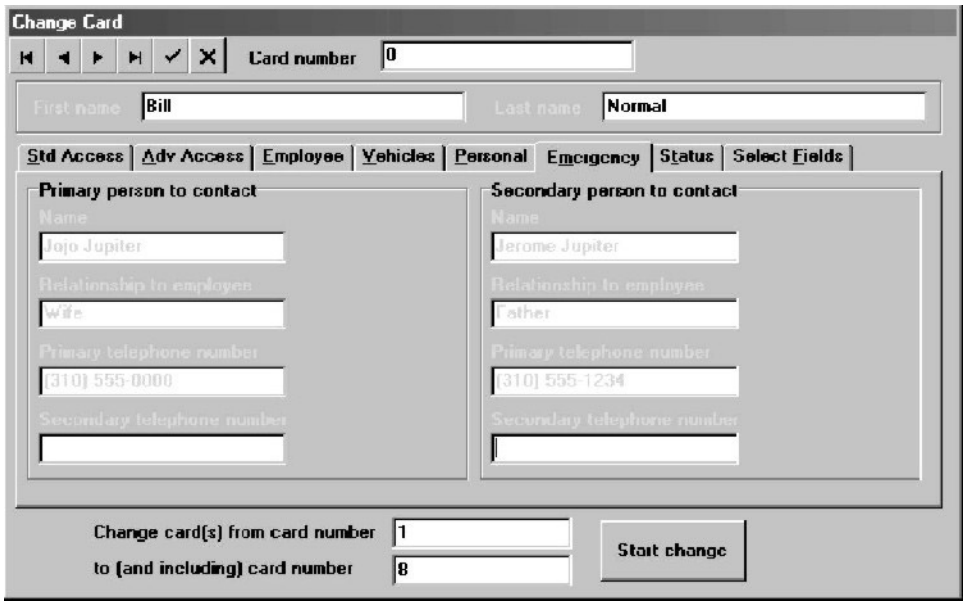
Social Security Number	10 characters
Citizen	10 characters
Home Address City	20 characters
Home Address Street	20 characters
Dependents	5 characters
HomeTelephone Numbers	20 characters

Physical Description-

-Weight	10 characters
-Height	10 characters
-Eye color	10 characters
-Sex	5 characters
-Marital status	5 characters
-Hair color	10 characters

Change Card: Emergency

Click on the **Emergency** page file tab. It contains the following fields for primary and secondary contacts.



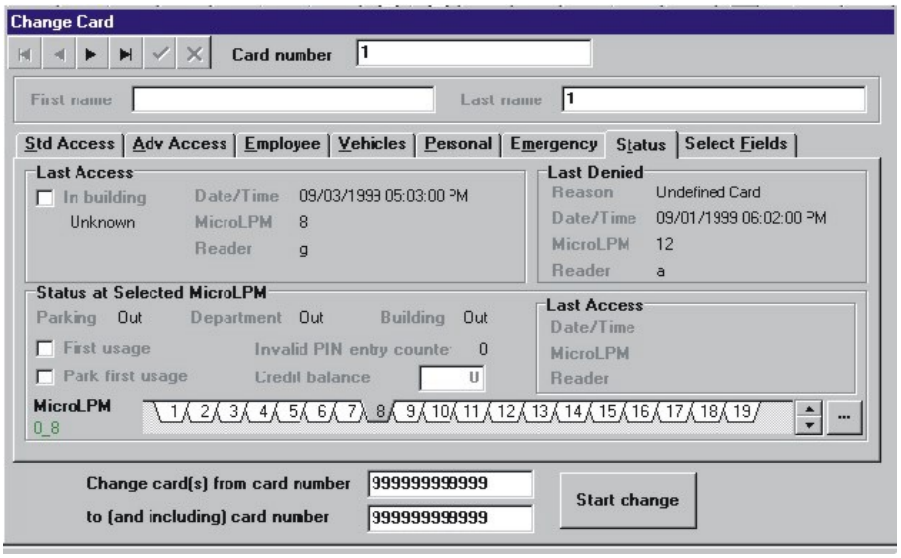
Name	32 characters
Secondary Telephone Number	20 characters
Relationship to Employee	10 characters
PrimaryTelephone Number	20 characters

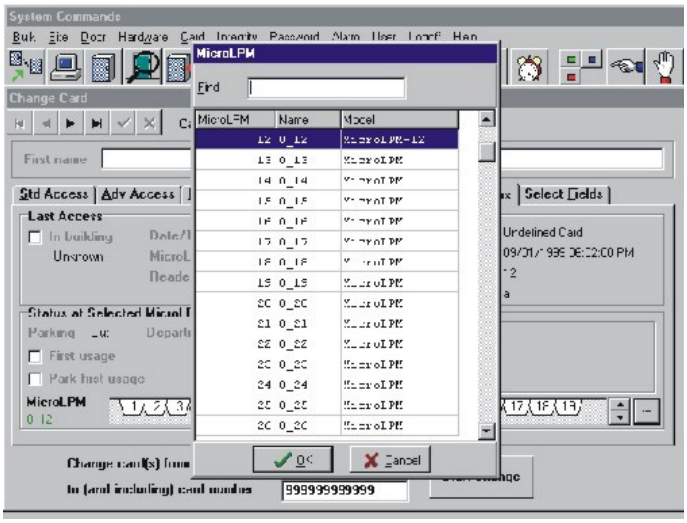
Change Card: Status

The system must be on-line in order to monitor card status. Clicking on the Status tab allows the administrator to upload real-time information for an employee. The first portion of the panel displays the LAST authorization information for an employee, derived from all panels (i.e., it includes the LAST card read from ALL panels on-line to the PC host). The LAST read feature of the LiNC-NET is maintained by reviewing each history record uploaded from each panel to the PC host. The most recent card read information is kept on hard disk and is displayed in the first portion of the panel. The second portion of the panel displays the status of a single panel, and is shown on the screen for each request.

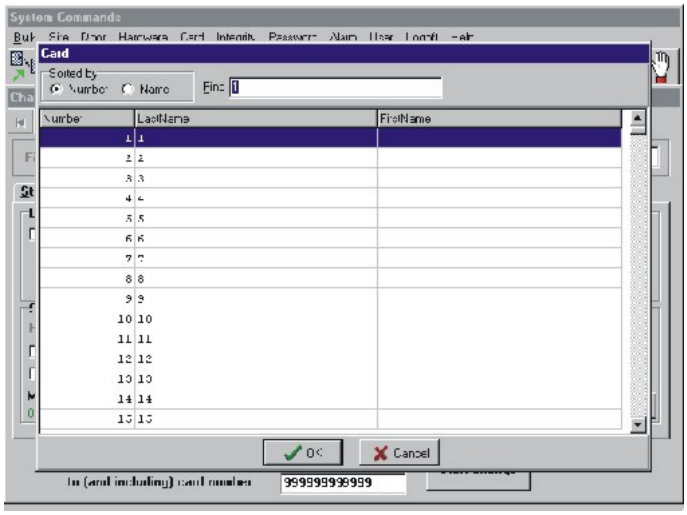
Last Access/Last Denied

If In building is selected, the in/out building status of a cardholder will be displayed. The system will display the last date and time that the card was used, and the panel and reader used. If the card was denied at any time the system will also document the Last Denied access attempt. The reason for the denied access will also be shown (e.g., expired card, invalid authorization group, etc.).

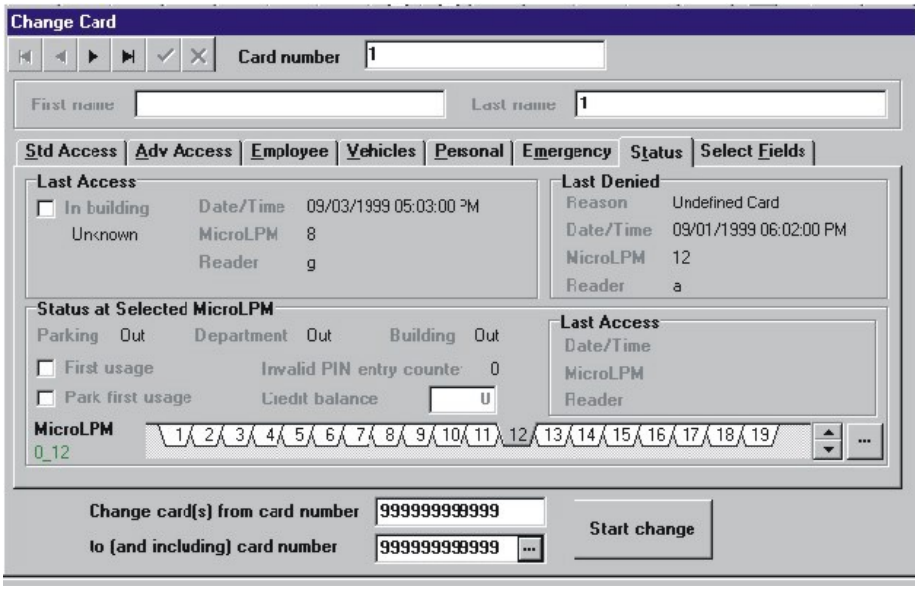




Click on the **Search** button to change to another panel. You can then observe a card's specific status (last usage) at the readers connected to it.



Click on the **Card Number Fields Search** button to scroll to another card record. Click on the **OK** button to observe its status.



Status at a Selected Panel

The card status selections are input automatically by the system and indicate whether the cards have been used in the system. This is used in conjunction with entry/ exit of the parking, building, and department.

The Parking indicator will show **In**, if the employee is in the parking lot. The Parking indicator will show **Out**, if the employee is not in the parking lot.

The Department indicator will show **In**, if the employee is in the area designated as department. The Department indicator will show **Out,** if the employee is not in the department area.

The Building indicator will show **In**, if the employee is in the building. The Building indicator will show **Out**, if the employee is not in the Building.

First Usage When the card is issued for the first time, the entry/ exit rule is not applied for the first access. Select this option if you wish to ignore the Entry/Exit rule for the first access. If you do NOT select the option, the Entry/Exit rule will be followed.

Park First Usage Select this option if you wish to ignore the entry/exit rule for the first access to the parking area. If you do NOT select the option, the entry/exit rule will be followed.

Invalid PIN Entry Counter This area will show the number of PIN entries before a user PIN error occurs. This field will normally be blank.

Credit Balance

Enter the number of credit units an employee will be assigned when the system is enabled for access cost. Refer to Door Overview/Features for access cost per transaction for each card group. Depending upon the number of credits issued to a card group; the Access cost for a card group will be subtracted from that balance. The system will subtract the value that was assigned for the card group as access cost for every valid transaction. The range of the credit balance is 0 to 999.

The system will display the last date and time that the card was used, and the reader accessed at the selected panel.

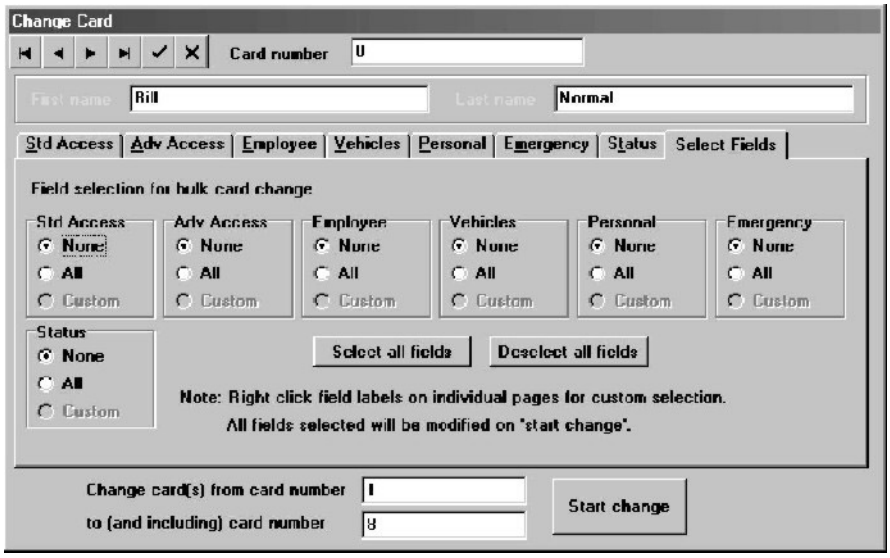
NOTES

Depending on the panel firmware version, when toggling status for In/Out of doors, either an Authorized card or an Authorized card followed by a door open activation, will toggle In/Out status.

Firmware versions 1.9.7 and 7.9.7 or higher provide for an Authorized card followed by a Door Open to toggle **In/Out** status. Firmware versions 1.96, 3.96, 5.96, or 7.96 or lower provides for an Authorized card ONLY to toggle **In/Out** status.

All IQ and SIM panels require that the door be opened prior to updating card status

Change Card: Select Fields



*Card File: Variable Length Field Sizes for First and Last Names

Modifying the field length in the default path C:\Program Files\PCSC\\LiNC-NET version 5.11.2 folder can expand the fields for Card First Name and Last Name. Click on the **ZCAFIELD.DAT** file. This file contains two columns. The first column indicates the size of the filed. The second column contains a comment indicating the field for which the size is intended. The order of the fields is critical. For First name (standard 32 characters) see **zFirstName**. For Last name (standard 32 characters), see **zLastName**.

*Card File: Variable Length Field Sizes for First and Last Names

Modifying the field length in the C:\Program Files\PCSC\LiNC-NET version 5.11.2 folder can expand the fields for Card First Name and Last Name. Click on the **zCAfield.DAT** file. This file contains two columns. The first column indicates the size of the filed. The second column contains a comment indicating the field for which the size is intended. The order of the fields is critical. For First name (standard 32 characters) see **zFirstName**. For Last name (standard 32 characters), see **zLastName**.

33	**zFirstName**
33	**zLastName**
11	**zCaEmpNo**
11	**zCaCompany**
11	**zCaDept**
11	**zCaDiv**
11	**zCaRegion**
11	**zCaSite**
11	**zCaCarMake**
11	**zCaCarModel**
21	**zCaCarUse**
6	**zCaCarYear**
11	**zCaCitizen**
11	**zCaColor**
7	**zCaDependents**
11	**zCaHeight**
5	**zCaMarital**
5	**zCaSex**
11	**zCaSSN**
11	**zCaWeight**
11	**zCaWhoRel**
21	**zCaCity**
21	**zCaStreet**
20	**zCaTelNo**

To Change the Size of a Field

Use a text editor such as to change the integer corresponding to the filed. Care should be taken in describing the field sizes. The size of each record is affected by the size of its components (i.e. fields). Having too many large fields could degrade the overall performance of LiNC-NET.

The Create DataBase program must be launched after each change in zCAfield.DAT:

1. Select the **MicroLPM** tab and scan all panels.
2. Select the **Files** tab and select **All Files**.
3. Select the Reorg tab and select Reorg to reorganize all LiNC-Net-NT data files.
4. Select the **LiNC-NET** icon to launch the LincnetNT program.
   Verify that the changes have taken effect in the **Card Names** fields in **Card Change.**

Integrity

Backup to Selected Drive-

Only **History** files will be backed-up to a selected drive. Press the arrow key and the drop down menu will display the available drives. Available Backup drives may be any physical drive on either your **Host** or **Workstation P**C, as well as any mapped Network Drives.

Insert a diskette for the backup procedure into the selected drive and click on the drive and then press the **Start Save** button. If the diskette was used for a previous history backup, the system presents the following options:

1. Appending the existing file

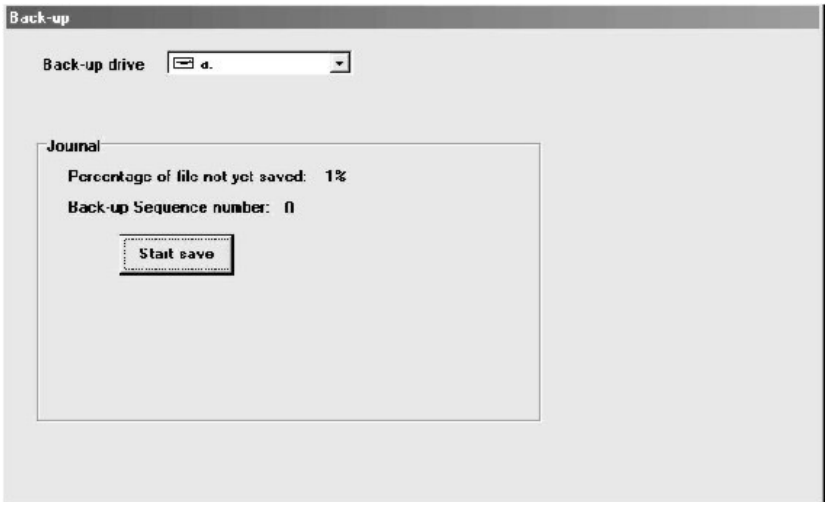
2. Overwriting the file

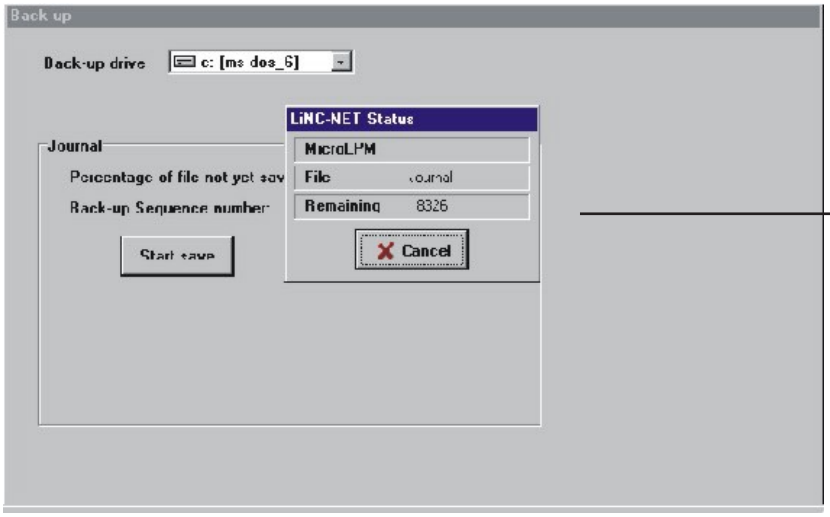
3. Saving to another diskette,

Or

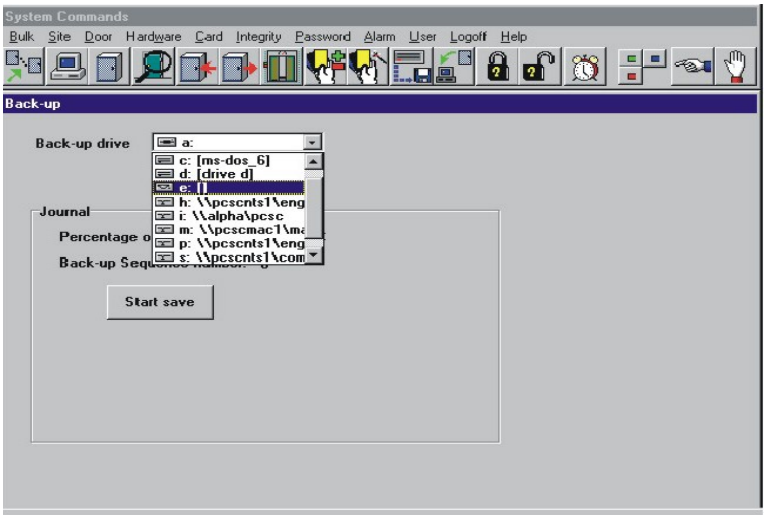
4. Canceling the backup operation. The menu will display the percentage of files not yet saved as the back up progresses.

NOTE **Backup** does **NOT** save the data files. To save the data files, use the Windows-**NT/98** backup procedures.





Example of a backup od data underway to **Drive C**.



Click on the backup drive box and click onthe appropriate drive (floppy/ hard disk/mapped net-work drive) to back data up.

Upload from MicroLPM-

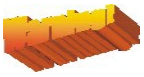
Upload is the converse of Download. Data from the panels are transferred to the LiNC-NET. DatabaseFiles can be individually selected for upload. Do NOT attempt to upload cards from the panel in an auto-dial configuration.

NOTE All panels must be on-line.

If you have only one panel:

1. Choose File(s)
2. Selected [from above list] or All
3. Then, select MicroLPM(s) Current [i.e. tabbed] ONLY.

NOTE You must use MicroLPM(s) All, for uploading the card database.



Any file uploaded from the panel will overwrite the existing files on the hard disk.

Field Definitions

Selected Files Select the files to be uploaded, if uploading individual files.

NOTE Data shared by all panels are uploaded from the current panel that is selected by a tab at the bottom of the screen. Asterisks identify the files shared by all panels.

Upload

File(s) Choose Select to upload only the selected files, or choose ALL to upload all files.

MicroLPM(s) Choose **Current** to upload only from the panel selected by the tab at the bottom of the screen, or choose **ALL** to upload from all the panels that are line. For dial-up panels, they must first be brought online before an upload from them can occur.

Start Select this button to start the upload.

Select MicroLPM tab if uploading from one panel. The name assigned to the panel will be displayed in the lower left corner of the screen.

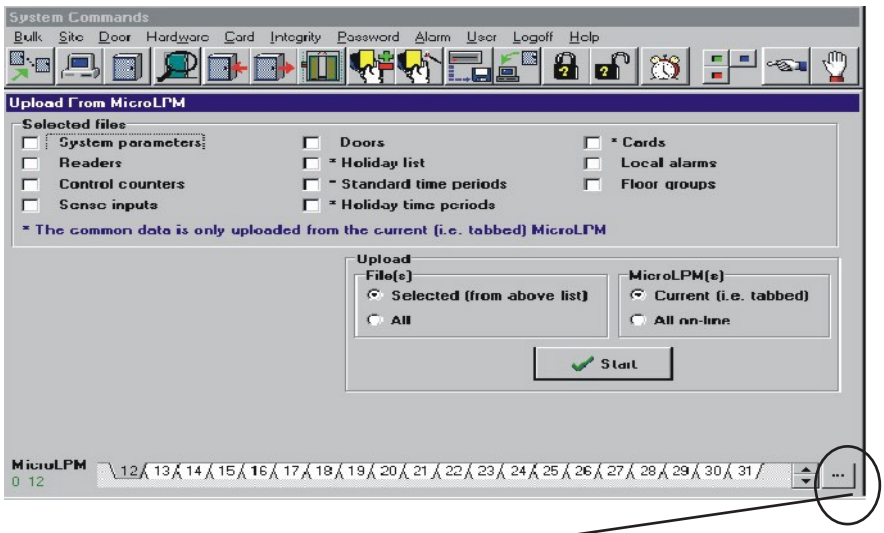
To Upload Data:

1. If uploading from one panel, select the panel from the MicroLPM tabs, and select **Current** in the **MicroLPM(s)** section. If uploading from all panels, select All in the **MicroLPM(s)** section.

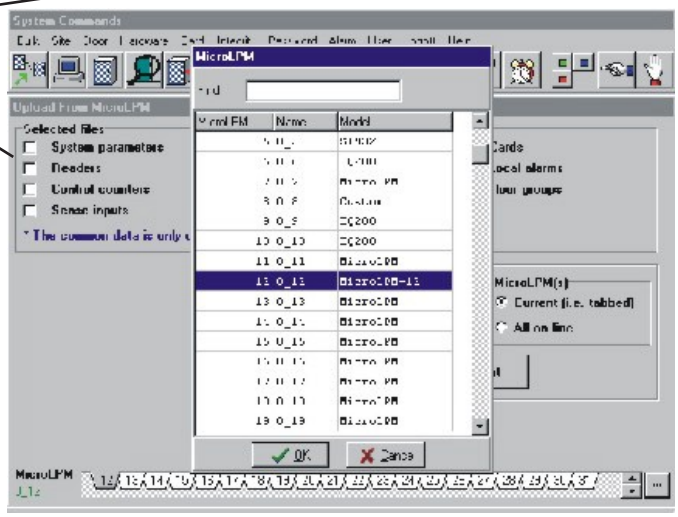
2. If uploading selected files, makes the file selection in the Selected files panel and select Selected in the File(s) radial button group. If uploading all files, select ALL in the File(s) radial button group.

3. Select the upload button with the desired scope.

4. Select the Start button to begin the upload.



Click on the **Search** button to select a different panel for uploading data. Once it is highlighted, click the **OK** button to change to the *new* panel number.



NOTE Upon uploading system parameters from MicroALM or MicroALM8, the ALM field in the MicroLPM Setup screen will automatically be deselected and the Out #1 field will be automatically selected. The user will have to manually revise the MicroLPM Setup configuration.

A status window is displayed showing the progress of the upload.

MicroLPM	MicroLPM number being uploaded from.
File	Name of the file currently being uploaded.
Remaining	Number of records still to be uploaded in the cur rent file.
Card Number	For the card file, the current number is displayed instead of the number of records remaining.
Cancel	Select this button to terminate the upload.

Password

NOTE The default ID is 0 and the password is **PYMTF** (uppercase sensitive).

Passwords determine which menus, **System Commands** or **User Commands**, operators can access. The system also determines a password time schedule. Which is to say, an operator can be limited access to the LiNC-NET system by time, day of the week, or denied on holidays. Each password is cross-referenced to a unique ID number.

For security purposes, LiNC-NET identifies each user by a password identification number (ID) instead of the name of the operator. Because the name of the individual who is assigned an ID #/Password is not documented within the LiNC-NET software, it should be recorded and stored in a secure environment for future reference.

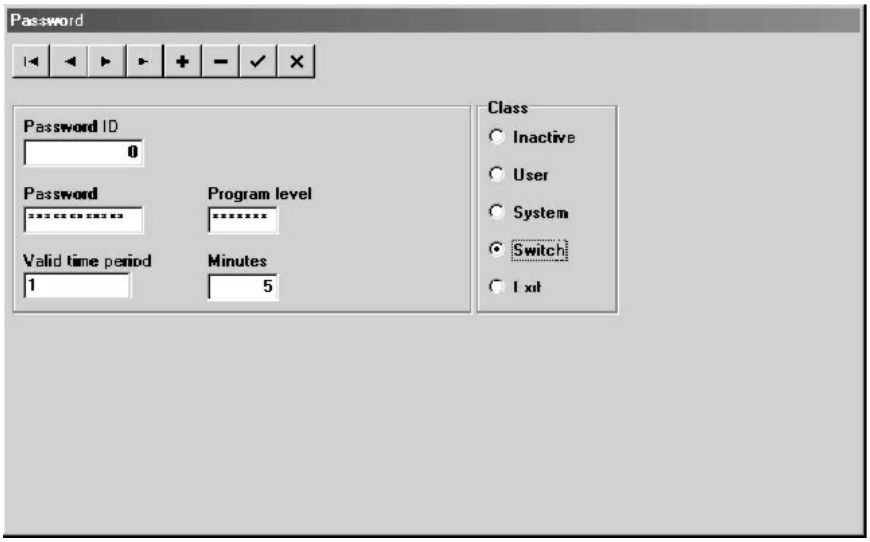
Different password level assignments work in conjunction with **Program** level assignments to prevent unauthorized persons from accessing specific menus and sub-menus (system resources). **Password/Program** levels values range from 0 to 99, where zero yields the highest and 99 allows the lowest level of access. For a particular password to be able to access a menu, the **Password Program** level must be less than or equal to the Menus level. (Password level [numeric value] = **Menus** level [numeric value]) A matrix of priority value levels should be noted. To configure the **Password** level values, enter the number in the **Program** level block.

NOTE Accidental lockout of the system could occur should all high level (low numeric) values be assigned to LiNC-NET menus (modes) and sub-menus (icons within each mode of operation), and the passwords have low level (high numeric) values assigned to them. This would mean that the level required to access the password setup menu is of greater authority than any password actually possesses.

Each password ID number can also be assigned a valid Time Period whereby access to the system will be allowed when that **Time Period** is in effect. View the range of **Time Periods** available. Refer to the **Time Period menu** from the User Commands Menu to view **Time Period** parameters.

The Class attribute limits the particular mode (**System Commands, User Commands**) that the operator may access with their password. A **Switch Class Password** may access both the **User** and **System** modes (switch between them).

Additionally, this **Class** determines if the user is permitted to terminate (**Exit**) the operation of the LiNC-NET program. It is possible to have a password defined in the software, but not permit its use (Inactive class). If the class definition is changed for the password used by the current operator, the changes do not take effect until the next time that the password is used. Therefore, once a change is made, the operator should Logoff and back on again to implement the modification to the password definition.



The Password Menu

NOTE **Program Level** values are configured in a separate file to prevent tampering. Only the System Administrator or security personnel should access this file. Any password, which has access to the Password menu, has access to the **Program Level** menu. **The security administrator should perform program Level values**, as all of the access levels will be determined by his or her data entry. If authorized, see the following restricted instructions for setting these password levels.

Field Definitions

Password ID Cross-reference number for passwords.

Password A word or acronym (case-sensitive) for accessing LiNC-NET menus. The password is “encrypted” (****) in the data files so that other programs are unable to view them.

Program Level Restricts accessibility by assignment of higher and lower values for each operator.

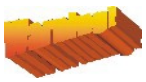
Valid Time Period Segment of time that allows the password access into the system. Specify a time period that a password will have access to your system from 0-999. 0=never allowed signon. 1=always able to sign on, and 2 through 999 allows specified sign on times.

Minutes The number of minutes of keyboard idle before automatic sign-off occurs. N/A. Use a screen saver—however, not a 3D type.

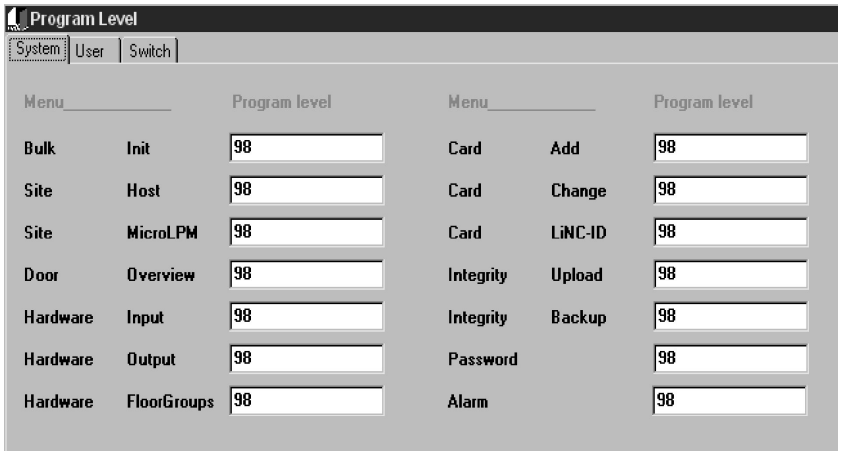
Class: Defines menu access-

- **-Inactive** Not used
- **-User** User menu commands only accessible
- **-System** System menu commands accessible
- **-Switch** Both System and User menu commands accessible
- **-Exit** Password required to Exit LiNC-NET for Windows-NT/95/98

Program Level Configuration



This is a restricted section! The following instructions are intended for use by the System Administrator or those individuals who will be responsible for configuring the Password and Password Program levels, which will allow restricted access to the LiNC-NET for Windows-NT/95/98 menus. Use the worksheets located in the back of this manual. Any password whose program level permits it to access the Password Menu will also be permitted to access to the Program Level Menu.



The **Program Level** menu is used for configuring access levels to the menus in LiNC-NET for Windows. The program level value is “encrypted” (****) in the data files so that other programs are unable to view them.

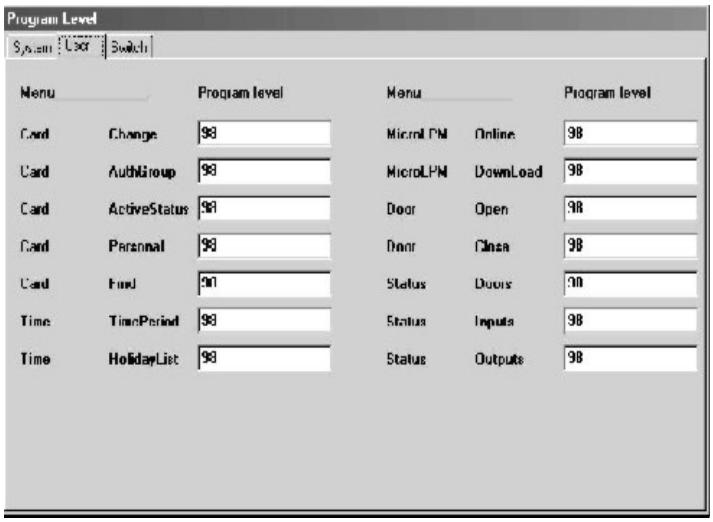
The **Program Level** menu is divided into 3 files. The first lists each of the **System Menus** (icons) that can be programmed for access. The second part assigns the program levels for the **User Menus** (icons). And the icons of the third part allow for the Switch or menus that both system and user modes can access. Each file tab label can be assigned a level of access to that function, in the form of a numeric value.

The operator configuring this system, must carefully fill in the appropriate program level entry, being aware that access to each field must be coordinated with the each operator’s password ID number, password, access time period, and designated accessibility to **System**, **User, Switch** and **Exiting** modes.

NOTE Before beginning this procedure, please be sure that the principles of the Password levels are understood. A Program Level is a hierarchical (organized according to rank) arrangement of authority used to govern which logon passwords may access the different areas of the LiNC-NET for Windows-NT/95/98 program. Once the Program Level system is configured, access to the Password menu itself becomes limited to those given access. Avoid accidentally screening out key operators or security from accessing the Password menu!

To Begin-

Click on the **Program Level** icon and the **System** screen will appear. The file is divided into three columns. The first column describes the **menu heading**. The second column identifies the sub-menu description. The third column is reserved for assigning a **numeric value for access** to each menu. By default, all LiNC-NET menus and sub-menus have **program level 98** assigned to them. (This is the second lowest program level.)



Program Level Hierarchy

Range of numeric values = 0 to 99 (100 possible levels) where:

Default **PYMTF*** **0 = Lowes**t numeric value (Highest program level)
1
Ø
Assigned to menus by default **98** (2nd Lowest Program Level)
99 = Highest numeric value (Lowest Program Level)

* The default password, **PYMTF,** has program level 0 (zero) assigned initially. It therefore possesses the highest level of authority and may access all LiNC-NET resources

NOTE Before changing the **Program Level** values, make a list of operators and the levels of accessibility that they will be assigned. Each password entry will have an assigned program level. When the **Program Level** value (numeric value between 0 and 99) of the operator's password (as programmed in the **Program Level** field of the **Password Setup** screen) is less than or equal to the **Program Level** assigned that menu function is available. If the m**enu's Program** Level is less than the operat**or**'s **Program** Level, then the function is NOT available.

Program Levels may also be programmed from **0** to **99.** Operators whose **Program Level is** 99 (the Highest numeric value) would only be able to access menus whose **Program Level** is equal to ninety-nine (Lowest Program Level). Conversely, operators whose **Program Level** is **0** (Lowest numeric value) would be able to access menus whose **Program Leve**l is equal to zero (Highest

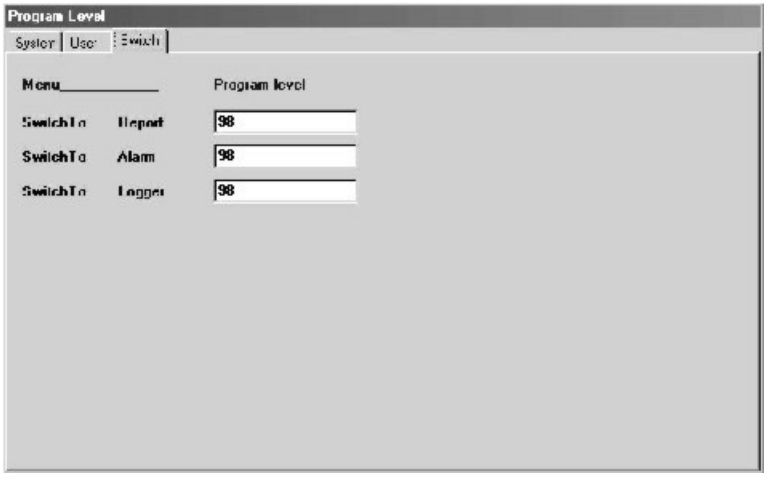
Program Level) as well as menus whose program Level is lower than this operator's assigned Program Level. Since all other Program Levels are lower than the level zero, such a password would be granted access to all menus.

Remember- In order for a password to access a menu, then:
The lower the numeric value, then the higher the Program Level authority.

Using the worksheet in the back of this guide, enter the values for each field, keeping in mind that access to the **Password** menu itself must be assigned to the person(s) with the highest level (level zero) of access so that no tampering will occur after the initial setup.

The **Program Levels** will be programmed in conjunction with the operator's password, password ID number, the valid time period, and by the field or function that they will be programmed for: **[Inactive**, **User, System**, **Switch** (BOTH **User** and **System**), and **Exi**t].

After making the numeric assignments, press **Logoff** and re-start LiNC-NET for Windows. Using the Exit and Class Password and appropriate I.D does this.



Open the LiNC-NET for Windows-NT/98 menu group and double-click on the LiNC-NET icon. An initialization process will begin, and then the logon screen will appear. Enter the default ID 0 and password, **PYMTF** (all caps) or use your personal ID #/password if one has already been previously set-up by the system administrator. If you are using the default (**PYMTF**) password, access will be granted to all menus, as it is assigned a **Program** level of "zero." The **Main** menu is displayed. Click on the **Password** menu. At this point, you may begin configuring the **Password ID** numbers with the **Passwords** and then the **Program Level** assignments. Be sure to select the task or menu **(Inactive**, **User, System**, **Switch**, or **Exit)** from the right side before pressing the check box on the navigator bar. Again, the access to the **Password** menu itself should be limited after this point to prevent tampering by unauthorized individuals.

NOTE In the course of setting up the system, the program levels will allow restricted access to LiNC-NET menus. There should be both access or entry passwords and an exiting password or passwords.

From the menu bar, press the **Halt! Hand** icon screen key or **Logoff** (or **<Alt> L**). The **Sign-On** screen will appear. To test for accessibility of the assigned passwords and program levels, enter each password ID and then the password associated with it, and note the presence and absence of the icons at the top of the **System** and **User Commands** screens. The number of icons displayed should reflect the access level configured for each operator's password and program level. Enter the **Exit** password to close and leave LiNC-NET for Windows-NT/95/98.

The information entered in the menu should be carefully administered and then recorded for safe-keeping. Knowledge of this menu should be restricted to prevent tampering with the entries.

Remember that more menus are accessible only to those with the ***lower*** value numbers (higher program levels). Your individual requirements will, of course, vary depending upon personnel responsibilities and the level of security required. It is possible to restrict access to LiNC-NET for Windows-NT/95/98 menus from one function to all functions. The absence or presence of icons at the command bar for both **System** and **User** modes in LiNC-NET for Windows will reflect each operator's restriction

Alarms

Sense Input Alarms Besides assigning a sense input to an alarm record, the operator may assign a priority level, a location, text for the journal record, and instructions in the event of an alarm.

Field Definitions

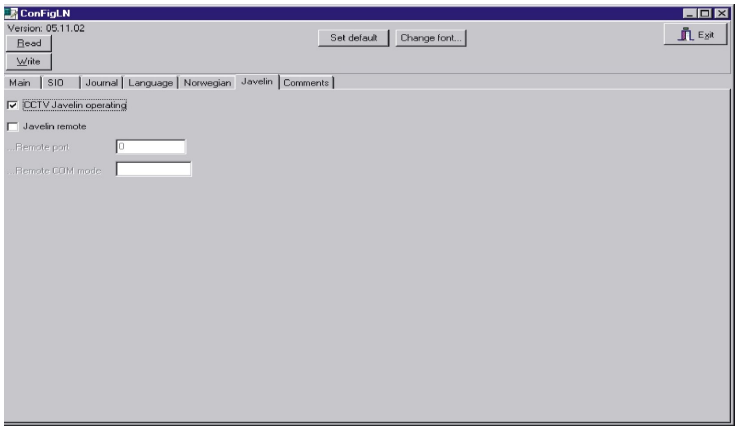
Number Refers to **Alarm** number. This is also the **Sense** Input number. Press Enter after selecting the alarm number. Add or delete a number using the add/delete option at the bottom of the screen. The name of the sense input, which was programmed in the Sense Input panel, is displayed to the right of the number.

Shunt Time Period This is the specified time period that an alarm is disabled. **0** = never shunted, **1** = always shunted, and **2** through **999** shunts the alarm during the specified time period. When a sense input status changes to a normal state, the event will be logged if the alarm condition occurred when the alarm was not shunted or if the sense status was not in a normal state when LiNC-NET was started.

Priority Active alarms are presented in priority order. Alarms with the lowest priority number are displayed first. For each alarm being configured, assign a value (0 being the highest) which will dictate in which order it will be acknowledged. Enter a number from **0** to **7** and press **Enter**.

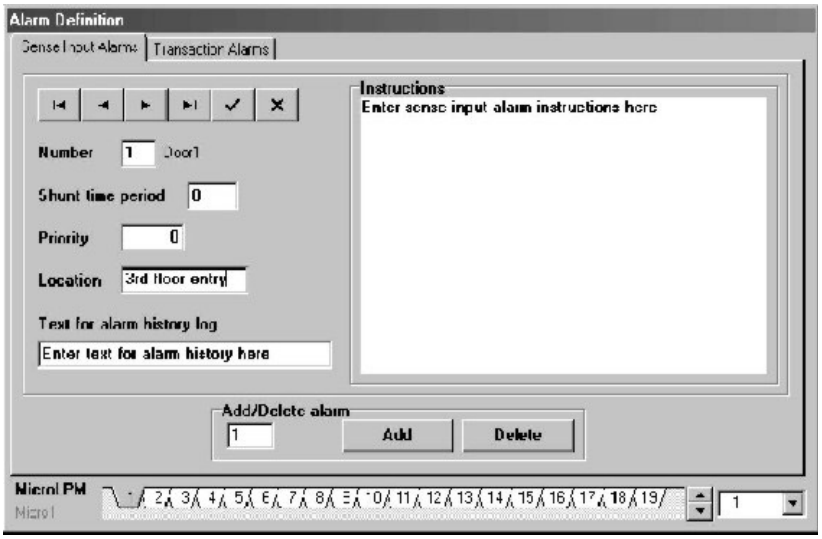
Map The Map field is used to define an **Alarm** number. This **Alarm** number must be defined in the Javelin program. When LiNC-NET detects an alarm (via sense input), a message is sent to the Javelin program using the MAP field as an **Alarm** number.

NOTE **Javelin (CCTV interface)** MUST have been setup and running. The **Map** field will only appear if specified in the ConfigLN program, under the Javelin tab. **CCTV Javelin** operating must be selected [4]. See the Initialization Setup File for LiNC-NET for Windows-NT/95/98 (ConfigLN program) section in this manual.



Location This is an informational field and can contain any text. Enter a name for the location of the alarm.

For Example: **3rdFloor, East Wing**. Press **Enter** after entering the location.



Text for Alarm Journal Log The text entered in this field will be appended to the journal record that is logged for this alarm.

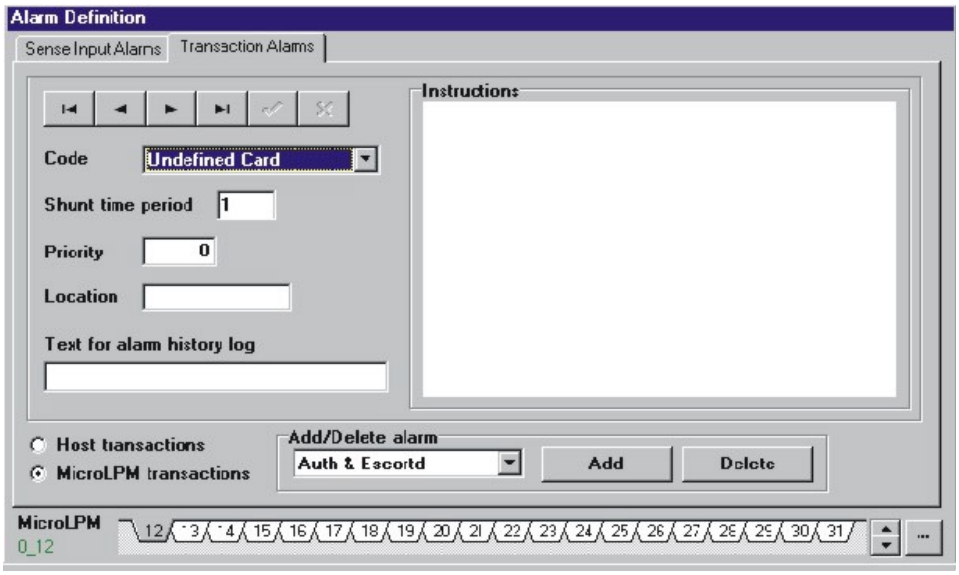
Instructions Enter text in this field that gives directions to the person responding to the alarm. The message may refer to other control counters, sense inputs, or any other reaction information. Press Enter to enter the instructions into the system.

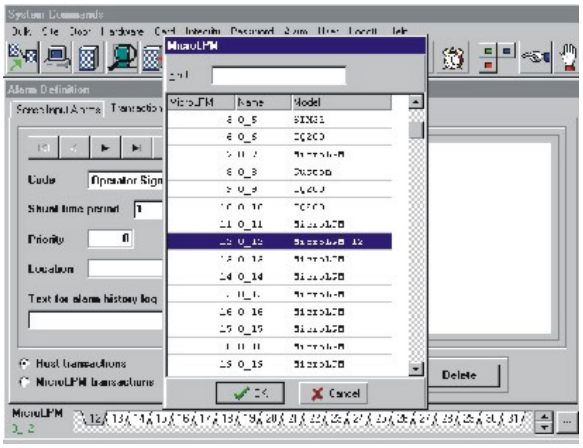
Add/Delete Alarm Enter the number of the alarm then select the Add or the Delete button. An alarm must be added before it can be defined.

MicroLPM Select a panel from the tabs at the bottom of the screen.

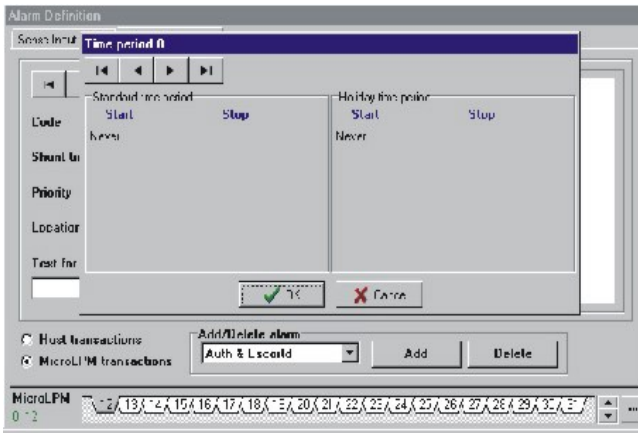
NOTE An alarm record CANNOT be changed or deleted while the alarm is active.

Transaction Alarms





Click on the **Search** button to scroll to another panel for defining alarms.



Tab to **Shunt Time Period** field and click on the **Search** button to scroll to a different **Shunt Time Period** for the **Sense Input/Transaction Alarms**.

Field Definitions

Code

Enter the Transaction code to be defined. Codes must be added from the add/delete box at the bottom of the screen before they can be defined and entered into the system. See the Real-time alarm code definitions at the end of this section.

Shunt Time Period

Enter the time period number whereby the alarm will be shunted (disabled) when that time period in effect.

Priority

Alarms are presented in priority order. Alarms with the lowest priority number are displayed first. For each alarm being configured, assign a value (0 being the highest) which will dictate in which order it will be acknowledged. Enter a number from 0 to 7 and press Enter.

Location

This is an informational field and can contain any text. A transaction alarm can take place at the Host or at the panel/reader location. Enter the location where the transaction alarm occurs.

Text for Alarm Journal Log

The text entered in this field will be appended to the journal record that is logged for this alarm.

Instructions

Enter text in this field that gives directions to the person responding to the alarm. The message may refer to other control counters, sense inputs, or any other reaction information.

Host Transactions

Select this radial button to define alarms for transactions that are generated at the Host PC. Panel selection has no effect when this button is selected.

MicroLPM Transactions

Select this radial button to define alarms for transactions that occur at panels. Select a panel with one of the tabs at the bottom of the screen.

Add/Delete Allarm

Select the code of the alarm then select the Add or the Delete button. An alarm must be added before it can be defined.

MicroLPM

Select a panel from the tabs at the bottom of the screen. This has no effect if the Host transactions radial button is selected.

NOTE An alarm record CANNOT be changed or deleted while the alarm is active.

Transaction Alarms Originating at the Panel

auth & escorted	Access was granted to a cardholder that is required to have an escort.
auth escort	Cardholder attempting access is recognized as an authorized escort.
bldg entry err	Occurs whenever a user tries to use a card without Bldg “Out” status to enter the building.
bldg exit err	Occurs whenever a user tries to use a card without Bldg “In” status to exit the building already entered.
card trouble	Six unsuccessful card-reads at a reader in one minute due to an unmatched card format or unmatched facility code.
Cost > Credit	The cost to gain access through the reader is greater than the cardholder’s credit balance. (Cost/Access accounting is supported in LiNC-NET for Windows-NT/95/98 as of version 5.10.1 software)
Database Corrupt	A checksum error is found in the battery backup RAM database or memory expansion card in the panel.
Date/Time Change	The date and time change at the panel was changed. This occurs each time that the panel is brought on-line.
Daylight Savings	The Daylight Savings date programmed into the panel has gone into effect.
Dept entry err	Occurs whenever a user tries to use a card without Dept “Out” status to enter the department.
Dept exit err	Occurs whenever a user tries to use a card without Dept “In” status to exit the department.
Duress	A cardholder or PIN terminal-user has entered a special PIN duress code at the PIN terminal.
entry/exit err	Occurs whenever a user tries to use a card twice successively to enter or exit an area already entered or exited (e.g., tries to enter the building twice without exiting in between).
escort required	Cardholder attempting access is required to have an escort in order to gain access.

event lockout	Each door can be assigned to an event lockout counter. If the counter is ON, access will be denied and the “event lockout” error code will be displayed to cardholders that do not possess override capability.
expired card	The current date is past the expiration date defined in the card holder’s record.
inactive card	Occurs whenever an inactive card is used in the system.
invalid reader	Cardholder is not allowed at this reader. As it is not included in any of the Authorization Groups assigned to their card.
invalid time	The cardholder has tried to use a cardreader at a time that is not assigned to the card’s Authorization Group.
not an escort	Cardholder attempting to escort another cardholder (who is escort required) through the reader is not recognized as escort or escort capable.
park entry err	Occurs whenever a user tries to use a card without Park “Out” status to enter the parking facility.
park exit err	Occurs whenever a user tries to use a card without Park “In” status to exit the parking facility already entered.
PIN entry err	The cardholder has entered an erroneous PIN number at the terminal.
PIN retry err	An erroneous PIN has been entered on the cardholder’s fourth consecutive attempt at entering their PIN.
Logoff	The Host has logged OFF of the panel.
Logon	The Host has logged ON to the panel.
Time-out	If no communication is made to the Host after a pre-defined time limit, the system “times-out” and the Host must re-log onto the system.
soft EntEx err	Cardholder has incorrect entry/exit status, but soft enforcement allows access, and statuses are synchronized.
system fault	The panel has lost power.
system restart	The power to the panel was restored or a “warm” boot of the panel occurred.
TPMOR auth 1	The first of two cards was authorized to satisfy the Two-Person Minimum Occupancy Rule.

TPMOR auth 2	The second of two cards was authorized to satisfy the Two-Person Minimum Occupancy Rule.
TPMOR violation	Violation of the Two-Person Minimum Occupancy Rule (one or both cards not authorized).
undefined card	The cardholder has used a card that has not been defined in the system.

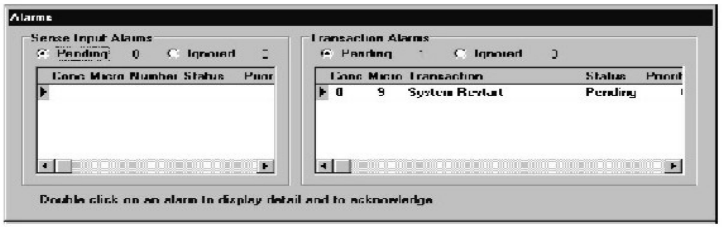
Transaction Alarms Originating at the Host

Anomaly	A general programming error code. Operator should notify their Technical Support entity when this occurs.
Data Disparity	When uploading records from the panel's host, the system compares the data against the records at the host. For each record that differs, "Data Disparity" is logged with the file name and record number.
Disk Error	A disk error has occurred while accessing a specific record.
LINC-NET System Start	Operator has signed ON to the system and LiNC-NET is in operation.
MicroLPM Down	A panel is no longer on-line.
MicroLPM Up	A panel is on-line after a panel-down occurrence.
Operator Signon	System operator has logged ON to the Host.
Operator Signoff	System operator has logged OFF of the Host.
Operator Signon Fail	System operator has entered incorrect password at the Host.
Start of Day	Indicates the start of the new day. When time changes from 23:59 to 00:00.
Upload Error	An error has occurred during the upload process.

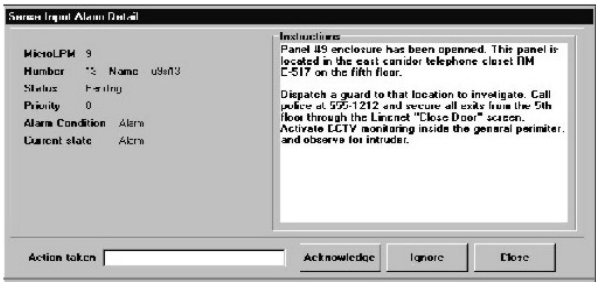
Alarm Acknowledgment- Press Alarm Clock

An alarm occurs whenever any of the above listed Transaction or Sense Input alarm conditions are tripped. The System or User Main screens will display a flashing red button along with intermittent beeps sounding.

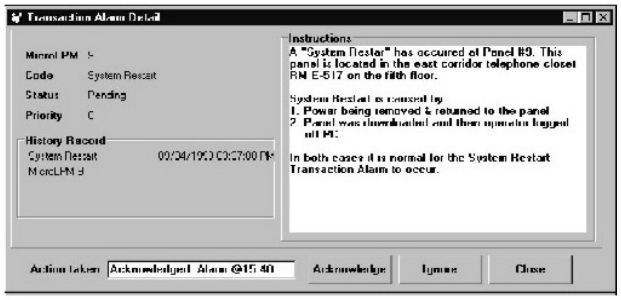
NOTE A sound blaster card and speakers may be installed, and a sound byte (WAV File) may be used to annunciate alarms. To acknowledge an alarm, the operator can double click on the alarm transaction that comes up on the Sense Input or Transaction Alarm window. A detail screen appears which lists panel, priority, status, condition, current state, and an Acknowledgment and Ignore button. Before acknowledging the alarm, the operator may specify the action taken in response to the alarm. The action taken is written as a part of the “alarm acknowledge” journal record, which is logged upon acknowledgment of the alarm. The audio and visual reference indicators of a pending alarm stay active until the operator has acknowledged all pending alarms. Optional software exists for graphic (ALARM VIEW) alarm annunciation. Contact your dealer for more information.



Alarms Field

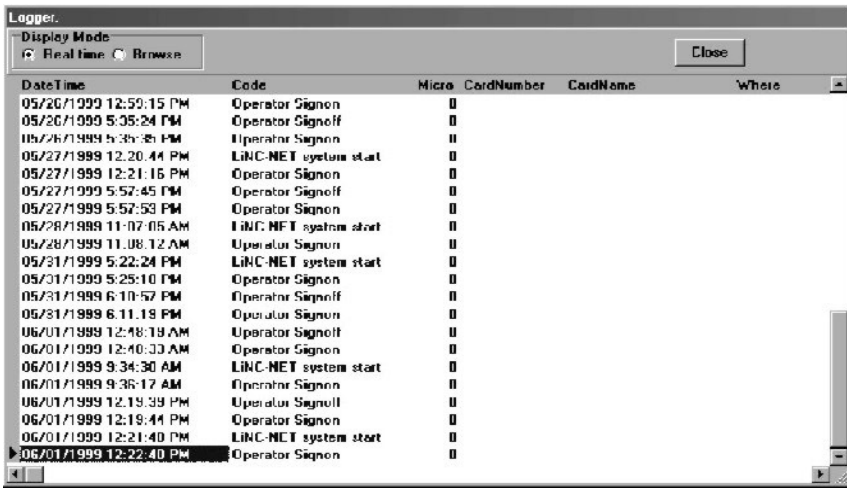

Sense Input Alarm Detail
MicroLPM 9
Number
Status
Priority 0
Alarm Condition Alarm
Current state Alarm
Instructions
Panel #9 enclosure has been openned. This panel is located in the east corridor telephone closet RM E-517 on the fifth floor.
Dispatch a guard to that location to investigate. Call police at 555-1212 and secure all exits from the 5th floor through the Lincnet "Close Door" screen. Activate CCTV monitoring inside the general perimiter, and observe for intruder.
Action taken
Acknowledge
Ignore
Close

Sense Input Alarm Detail


Transaction Alarm Detail
Code System Restart
Status Pending
Priority 0
History Record
System Restart
MicroLPM 9
Instructions
A "System Restart" has occurred at Panel #9. This panel is located in the east corridor telephone closet RM E-517 on the fifth floor.
In both cases it is normal for the System Restart Transaction Alarm to occur.
Action taken
Acknowledge
Ignore
Close

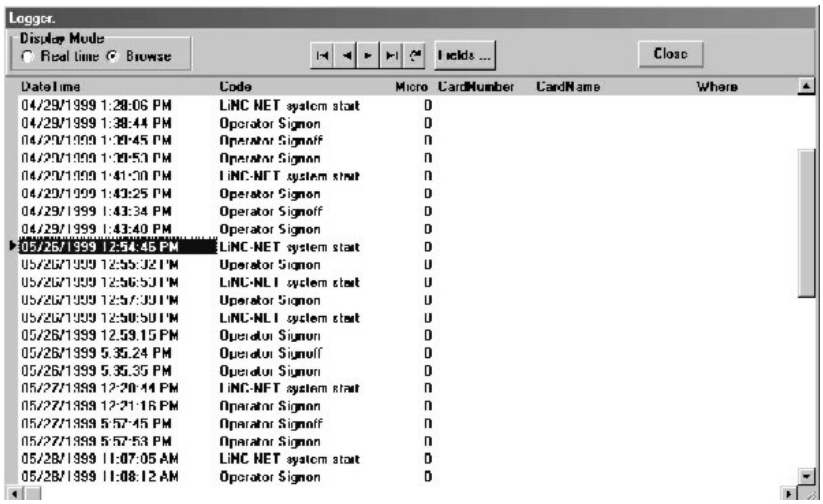
Transaction Alarm Detail

Logger

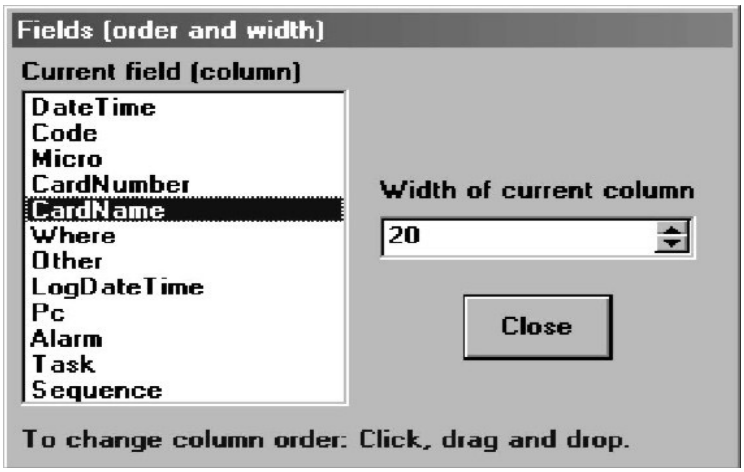

Logger.
Display Mode
Real time
Browse
Close
DateTime
Code
Micro
CardNumber
CardName
Where
05/26/1999 12:59:15 PM Operator Signon 0
05/26/1999 5:35:24 PM Operator Signoff 0
05/27/1999 12:20:44 PM LiNC-NET system start 0
05/27/1999 12:21:16 PM Operator Signon 0
05/27/1999 5:57:45 PM Operator Signoff 0
05/27/1999 5:57:53 PM Operator Signon 0
05/28/1999 11:07:05 AM LiNC-NET system start 0
05/28/1999 11:08:12 AM Operator Signon 0
05/31/1999 5:22:24 PM LiNC-NET system start 0
05/31/1999 5:25:10 PM Operator Signon 0
05/31/1999 6:10:57 PM Operator Signoff 0
05/31/1999 6:11:19 PM Operator Signon 0
06/01/1999 12:48:19 AM Operator Signoff 0
06/01/1999 12:40:33 AM Operator Signon 0
06/01/1999 9:34:30 AM LiNC-NET system start 0
06/01/1999 9:36:17 AM Operator Signon 0
06/01/1999 12:19:39 PM Operator Signoff 0
06/01/1999 12:19:44 PM Operator Signon 0
06/01/1999 12:21:40 PM LiNC-NET system start 0
06/01/1999 12:22:40 PM Operator Signon 0

LiNC-NET maintains a logger (history) file comprised of records transferred from various panels. History records are transferred (uploaded) automatically when the panel is on-line. The on-screen real-time journal appears when the “blue” button at the top of the screen is clicked on, and continues to scroll upward as additional transactions occur at the panels and readers. The logger records the following information: The PC host number (unless the system is a stand-alone unit), the panel number, the alarm status, the date and time logged, the date and time of occurrence, the name and location of where the transaction took place, and a code reference.

If the current **Display Mode** is **Real Time**, the current history file displays ongoing transactions as they are logged. To scroll back through the logger past the onscreen transactions, select **Browse** under **Display Mode**. By using the navigation arrows at the top of the screen, earlier transactions can be viewed.


Logger.
Display Mode
Real time
Browse
Fields ...
Close
DateTime
Code
Micro
CardNumber
CardName
Where
04/29/1999 1:28:06 PM LiNC-NET system start 0
04/29/1999 1:38:44 PM Operator Signon 0
04/29/1999 1:39:45 PM Operator Signoff 0
04/29/1999 1:39:50 PM Operator Signon 0
04/29/1999 1:41:30 PM LiNC-NET system start 0
04/29/1999 1:43:25 PM Operator Signon 0
04/29/1999 1:43:34 PM Operator Signoff 0
04/29/1999 1:43:40 PM Operator Signon 0
05/26/1999 12:54:46 PM LiNC-NET system start 0
05/26/1999 12:59:15 PM Operator Signon 0
05/26/1999 5:35:24 PM Operator Signoff 0
05/26/1999 5:35:35 PM Operator Signon 0
05/27/1999 12:20:44 PM LiNC-NET system start 0
05/27/1999 12:21:16 PM Operator Signon 0
05/27/1999 5:57:45 PM Operator Signoff 0
05/27/1999 5:57:53 PM Operator Signon 0
05/28/1999 11:07:05 AM LiNC-NET system start 0
05/28/1999 11:08:12 AM Operator Signon 0

To change the column order, click on **Browse**. A navigator bar will appear along with the **Fields...** button. Select the **Fields...** button and the screen below will appear.



To change the column order, click on the field name under **Current Field** (column) and drag it before or after the field where you want it to appear. The width of the column can also be customized by clicking on the up or down arrows under the **Width of Current Column** heading. Select **Close** when you have completed the changes.

User- <Alt> U

When signed on with the **Switch** class option password, the operator may switch to the **User** Commands Menu by clicking on the **User** heading or the padlock icon.

Logoff- <Alt> L

Logoff and return to the sign-on screen by clicking on the **Logoff** heading or the **Halt** hand icon.

Help- <Alt> H

LiNC-NET provides on-line information to assist in understanding your access control system. More often than not, you will refer to **Help** for procedures used infrequently, but as an accessible source of reference it will also remind you of certain routine maintenance procedures.

Once the **Help** window is displayed, you may move or resize it to your preference. Click on **Contents** once you have selected **Help**.

After you are in the **Help** screen, you can access other sub-topics by clicking on the topics given. Text links provide a direct reference point from major topic to more specific areas. The cursor or pointer will change to a finger-pointing hand when there is a topic that can be clicked on for further information.

The **Help** screen also has its own on-line **How-to-Use-Help**. Select the **Help** menu and click on **How-to-Use-Help**. The information presented here is displayed in this menu.

Printing a Help Topic

Help topics may be printed on the default printer. If more than one printer is hooked up to your system, you can select any one of them as the default printer using the **Print Setup** menu.

1. Select **Print Setup** from the pull-down menu in **Help**.
2. Select the printer that you are using.
3. Change the default printer options as required.
4. Select the options desired.
5. Click on the **OK** button.

Select **Print Topic**, when the default parameters have been setup.

NOTE You cannot print information from a pop-up window.

Traveling through the Help Screens

There are several different methods of accessing the different topics in Help. You can jump forward, move back, and search for specific information.

Moving Backward	Select the **Back** button on the **Help** button bar or type b. You will move backwards in the order that you previously viewed topics.
Display the Help Contents List	Select the **Contents** button from the Help button bar or type **c**.
Return to Help Topics Previously Viewed	Select the **History** button from the help button bar or type **t**. Double click on the topic that you wish to return to or select it and click (press Enter). Use the scroll bar, if necessary.
Search for a Topic	Select the **Search** button from the Help button bar or type **s**. Select the word or phrase that you want to search for. When you start typing, the words that most closely match the text you type are displayed. Select the **Show Topics** button and choose the topic that you wish to view. Choose the **Go to** button.

Reports- <Alt> Tab or Press (Switch to Report)

LiNC-NET is capable of producing reports to the screen or prin[illegible] report setup window contains a tabbed notebook. The **Display** page allows the user to select the fields to be included in the report and the **Search** page allows the user to specify the search criteria. The **Display** page also contains buttons under **Change Heading** that allow the user to alter the heading and the column widths of the fields.

Generate a Report

Reports generated by LiNC-NET give the user the ability to display or print system parameters and user-entered data. The following is a list of the reports available from LiNC-NET:

Authorization Group	List of Readers and valid Time Periods
Card (Authorization)	Cardholder's Access Control parameters
Card (Personal)	Cardholder's Personal Data
Card Status	Cardholder's Last access and Building IN status
Floor Group	Floor Group assignment and configuration
Holiday List	List of Company holidays
MicroLPM	Panel configuration
Host	Host configuration
Reader	Reader assignment and configuration
Input	Sense Input assignment and configuration
Output	Output assignment and configuration
Time Period	Time Period List
History	Record of transactions by date and time
Transaction Alarm	Record of transaction alarms generated
Sense Input Alarm	Record of sense input alarms generated

From the **System** or **User Commands** Menu, click on the green button and the **Reports Main** Menu shown above will appear. The **Reports Main** Menu displays icons for all of the **Report Options** available. Click on an icon or click on **Select a Report** and choose a report option. You will notice that each report menu is divided into 2 fields (except for **Host**):

1 Search **2 Display**

Search

Within each file, records are broken into fields. Depending on the report, the fields can be searched individually or collectively. When selecting a search field, the user can select a particular value, group, or string of values, depending on the field. When a field is selected, the field must satisfy (match) all search criteria requested. That is, if 3 separate fields are to be searched, the record to be printed/displayed must satisfy (match) each of the 3 search fields. When a field is selected to be one of the search criteria, a value for the search must be entered. These values will vary depending on each report. When selecting a value, be sure to follow the same conventions as entering data within LiNC-NET.

Display

Some of the reports exceed 80 characters per line in length. Therefore, when using an 80-column printer, the records will be truncated (deleted) past the 80th character on the right side of the screen. In order to display or print the reports without having to “lose” the data, the user should select only those fields that need to be printed. If a report exceeds the 80-character length, the user must de-select some other fields until the selected data fits within the maximum length. A second report may be required for additional field selections. If a 132-column printer is used, then truncated fields should not result.

Procedure:

1. Select the appropriate report icon or choose from the **Select Report** bar.

2. The report screen for the icon you have selected is displayed. Within this screen, select the search criteria as needed. Refer to the **Help** screen as required for assistance in definition and parameters.

3. Select **View** to preview and display the report.

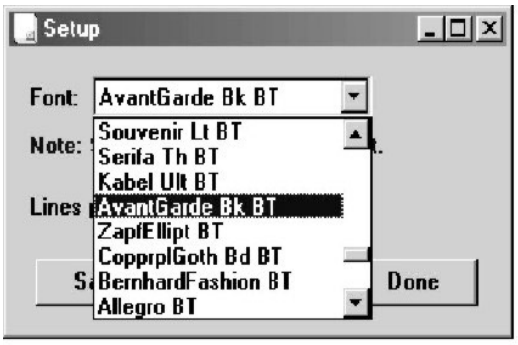
To Print the Report:

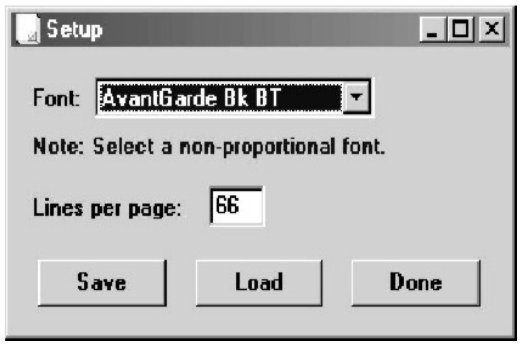
When the report is displayed:

1. Select **Print** option to print the first page of the report.

2. To print the entire report, select the **Exit** option to return to the **Setup** menu window. Press the **Print** button here for the entire printed report.

Setup: Reports- Printer Attributes





The **'Setup...'** button on the **Main** report screen brings up the **Setup** screen, which allows the user to select a font from the list of fonts available on the default printer. It also allows the user to specify the maximum number of lines the printed page will hold. The **'Save'** button makes the selection permanent by writing to a disk file. The **'Load'** button restores the previously saved selection. The **'Done'** button closes the **Setup** window. Any change made and not saved will be retained while REPORT is still running.

Report Headings

History-

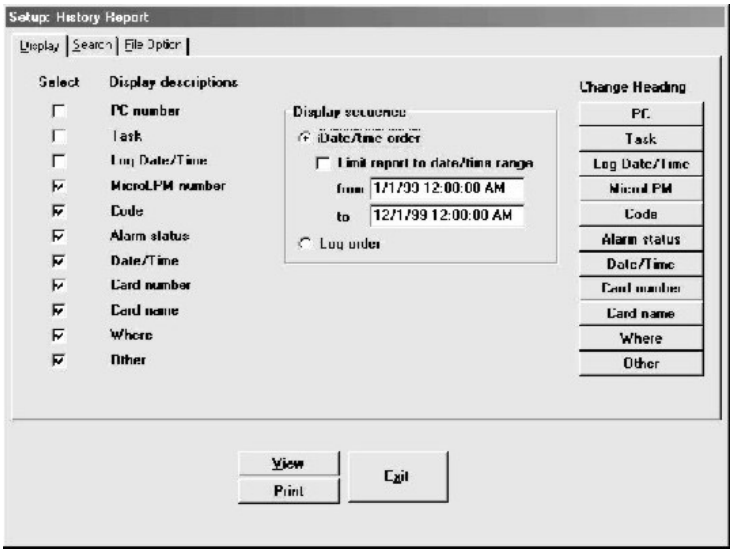
Press the Report Icon to view the "Logger" History listings at any time.

History reports can be the most important tool that the user has. The history report has the capacity to:

1. Determine which cardholder used a facility by:
   a. Time
   b. Date
   c. Card Number (or range of card numbers) or Name
   d. Reader Location
   e. Transaction Type (Code)

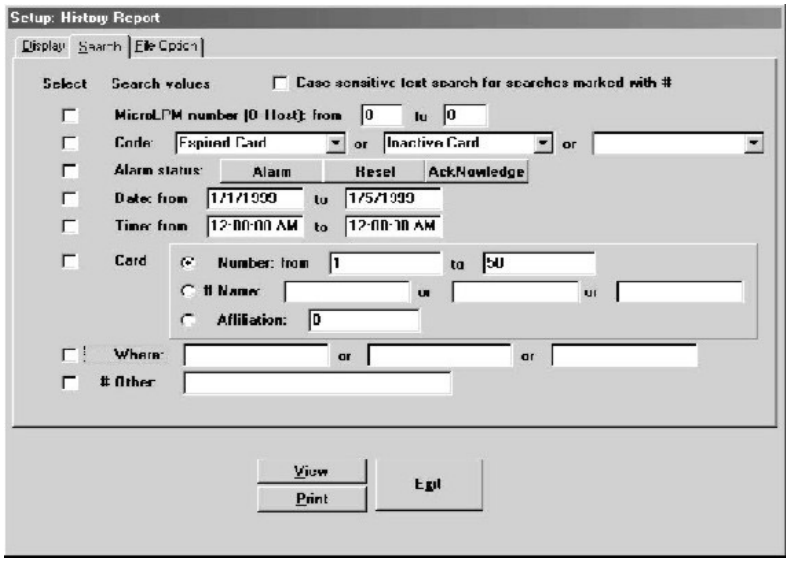
2. Provide a hard copy of the transactions for historical archiving.

Setup: History Reports- Display



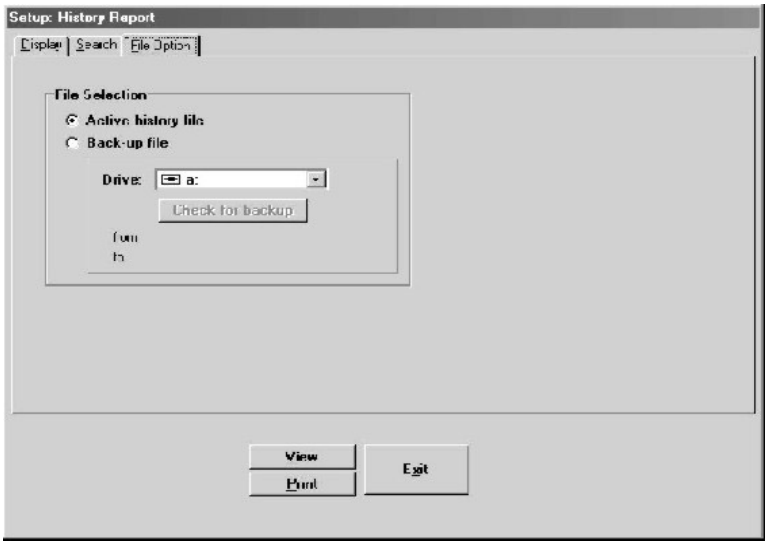
In the **Display Sequence** box, you can display the report in **Date/Time** order and limit the report by entering the starting date and time in the from box and then entering the ending date and time in the **To** box. This produces records in this date range in chronological order. Selecting **Display Sequence** by **Log** order and choosing **Limit** report to date/time range, the report will begin with the first record in the system. The **Change Heading** buttons permit renaming the labeling of each of the fields (columns) headers

Setup: History Reports- Search



In the Search field, the scope of the search can be configured by entering the dates required in the “from” and “to” boxes. As opposed to the date/time range in the display field, the time period covered is for each day of the range of dates entered, and can be entered in the **Time: From** boxes.

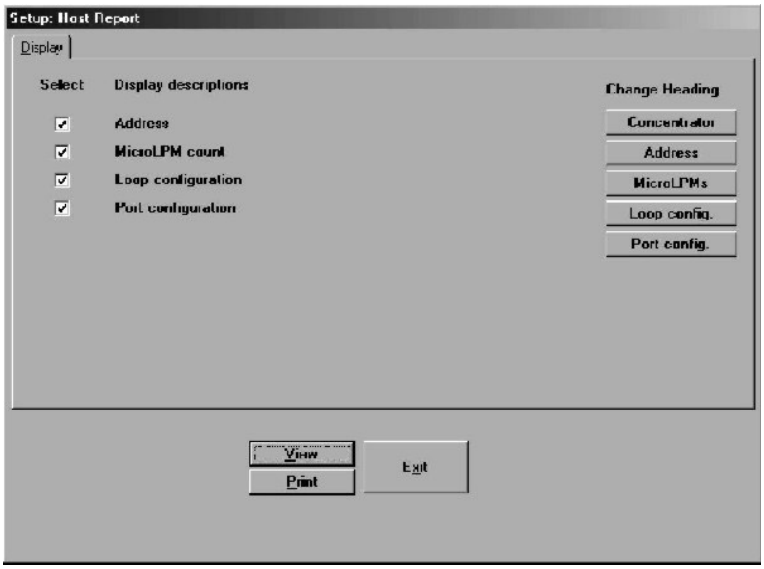
Setup: History Reports- File



Under **File Selection**, select **Active History File** to view transactions logged on the hard disk. Select **Back-up File** to view the back-up files logged on any physical drive on either your Host or **Guard** station PC, as well as any mapped Network Drive. The system will check for the files on the drive or diskette and will show the date range found in the **From:/To:** area, just below the **Check for Backup** button.

Host

The Host report has no values or search field option and serves only to provide information regarding the location of the host, the port configuration (port number, Baud rate, and phone number), loop configuration, and the number of panels in the system. At the host report panel, press View and the report information will be displayed or press Print to print a hard copy.



Setup: Host Report- Display

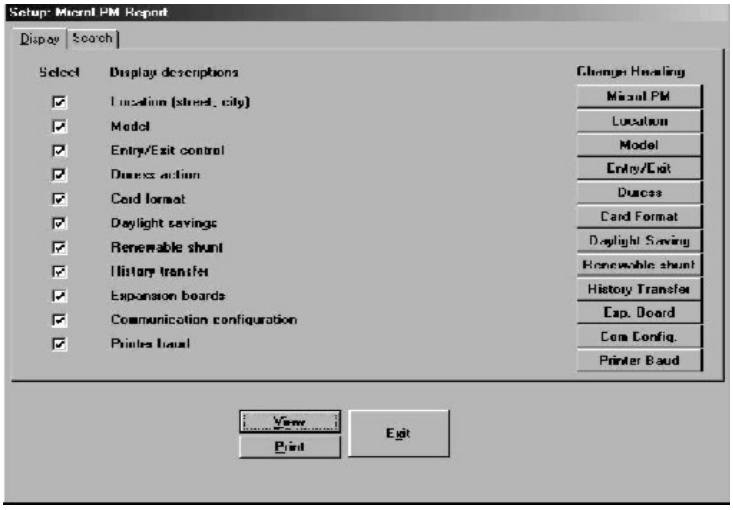
NOTE The Change Heading buttons permit the renaming of each of the field headers.

MicroLPM

The service personnel require configuration documentation for the panel. The hardware configuration and its software definitions help in diagnosing any problems that may occur in the future.

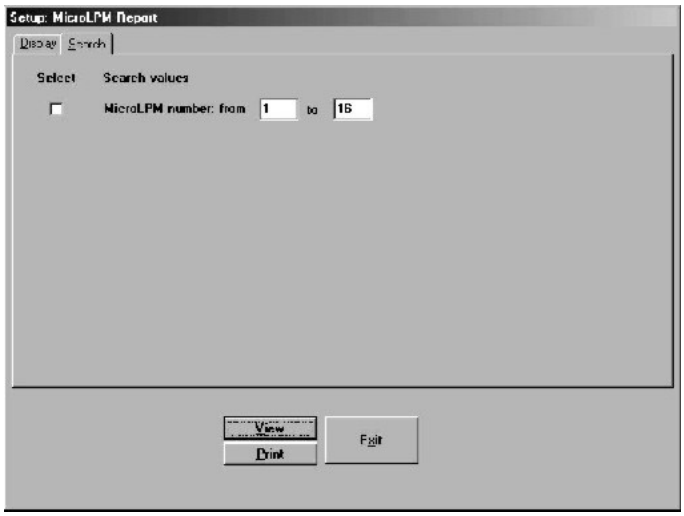
The MicroLPM report has the following information:

1. Panel address and location.
2. Hardware configuration (expansion board definition).
3. History transfer parameters AutoDial-up panels)
4. Card format.
5. Communication configuration.



Setup: MicroLPM Report- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

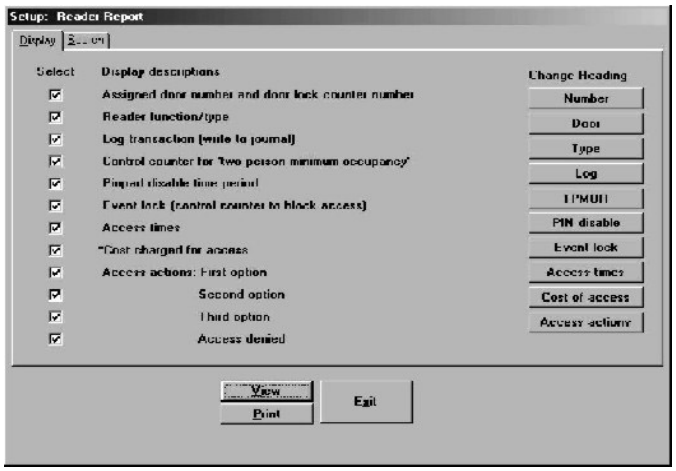


Setup: MicroLPM Report- Search

Reader

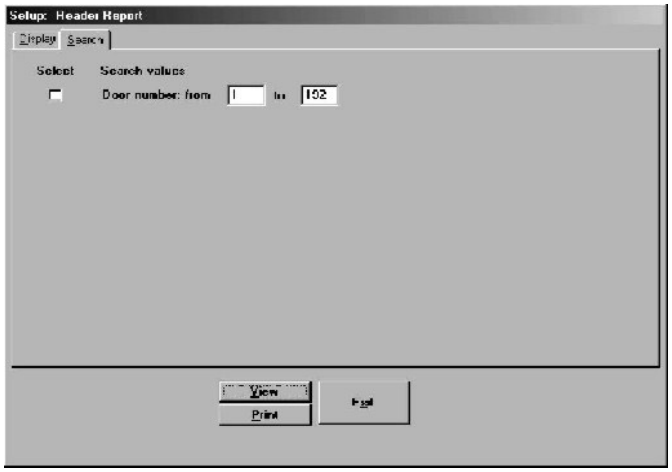
The reader report describes how the reader is defined and if any outputs are linked with the card transactions. The report is used to:

1. Indicate which door that the reader is controlling.
2. Indicate which lock output is assigned to the reader.
3. Indicate “Reader Type,” which describes how the reader is being used by the system.
4. Indicate whether the “Two-Person Minimum Occupancy Rule” is in effect.
5. Describe the access time (lock activation time) for standard and long access.
6. Indicate access actions, which describe whether output functions are for transaction by:
    a) Authorized Card Transactions.
    b) Card Group(s), or
    c) Denied Access



Setup: Reader Reports- Display

NOTE The **Change Heading** buttons permit the renaming of each of the field headers.



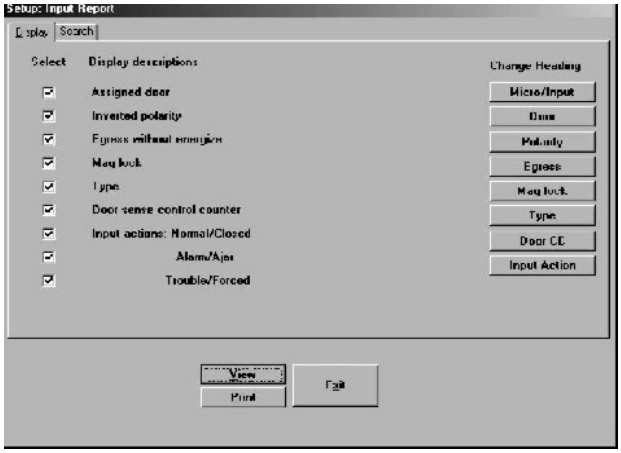
Setup: Reader Reports- Search

Input

A sense-input report documents the configuration and functionality of the sense inputs. Inputs can be linked to outputs depending on its state. The sense-input report can indicate the following:

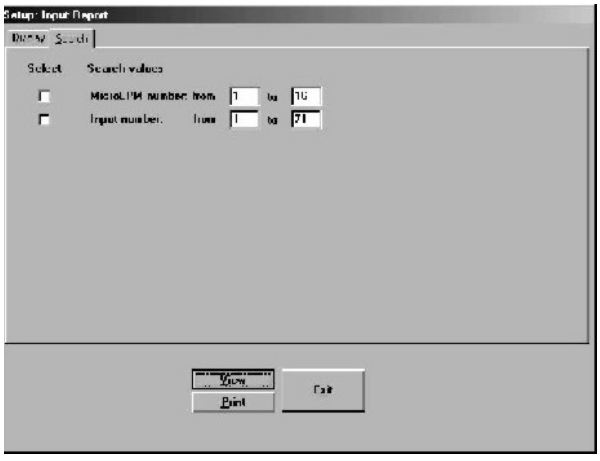
1. Input assignment to a door.
2. Sense input polarity (Normally Open or Normally Closed)
3. Egress-Without-Door-Lock Activation (Energized).
4. Magnetic Lock Option. (Required when using a magnetic door lock).
5. Sense input "Type" (e.g., alarm, input switch, event)
6. Sense input Activation of outputs by:

	Alarm		**Door**
a.	Normal	or	Closed
b.	Alarm	or	Left Open
c.	Trouble	or	Forced Open



Setup: Input Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

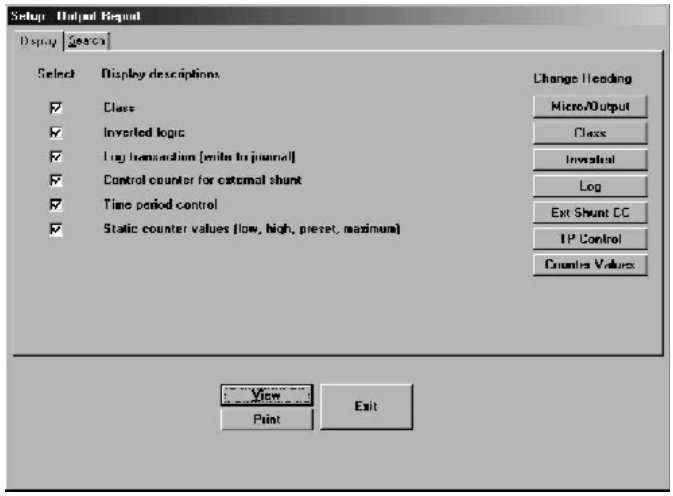


Setup: Input Reports- Search

Output

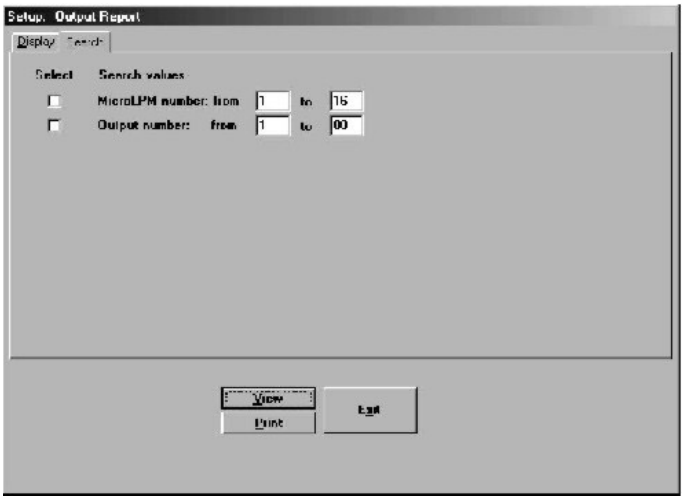
An output report documents the configuration and functionality of the outputs. Outputs are linked to control counters and/or time periods. The output report can indicate the following:

1. Control Counter Number
2. Control Counter Class
3. Inverted Logic Status
4. Log Transactions
5. CC for External Shunt.
6. Time Period Control
7. Static Counter Values.



Setup: Output Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.



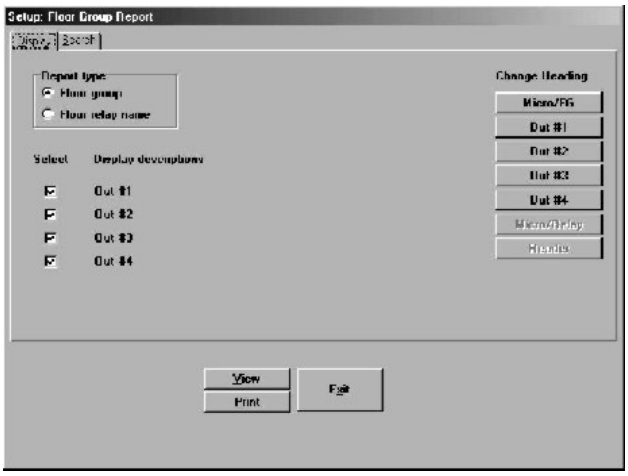
Setup: Output Reports- Search

Floor Groups

A floor group report describes the groups of relays that are associated with each floor group number controlled by each MicroELV in the system. Affected readers and Output boards can also be listed. The Report details the following:

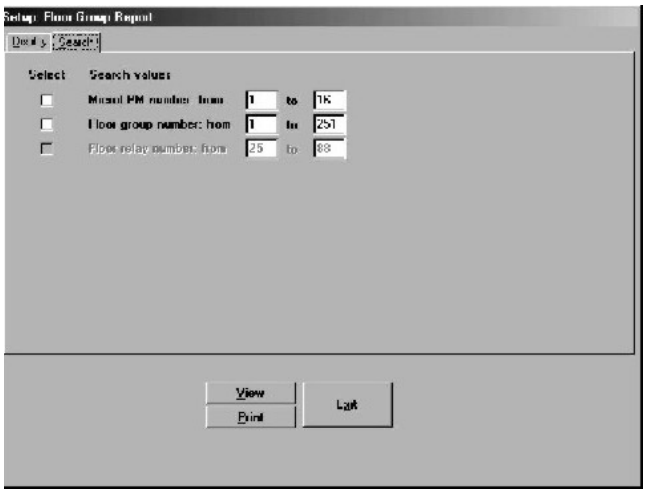
1. Floor Group number and name
2. The range of relay numbers associated with each Output board in the system.
3. The reader terminal associated with each floor group.
4. The panel number associated with each floor group

Under **Report Type**, select the Floor group button option to view which **Floor Group** has which floors. Select **Floor Relay Name** to display the panel, relay number, name, and the reader terminal associated with each floor group.



Setup: Floor Groups Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.



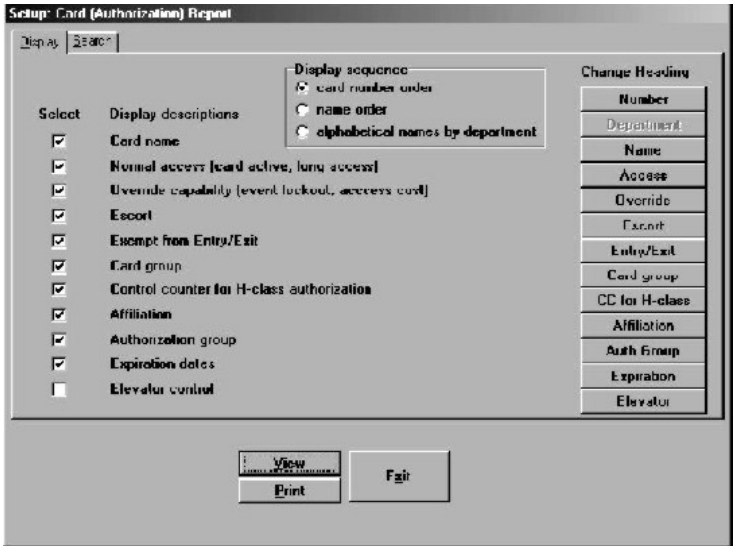
Setup: Floor Groups Reports- Search

Card (Authorization)

A **Card Authorization** report will describe the cardholder's access control parameters (active, long access, etc.). It can also be useful for searching for the following.

1. List a sequence of cardholders
2. Check those that are exempt from **Entry/Exit**
3. Look for a specific person by name or card number
4. Look for a particular affiliation and authorization group
5. Look for particular access privileges
6. Look for expiring or expired cards
7. Verify all active cardholders

Under **Display Sequence**, select the order option in which you want the display to appear. The default **card number order** will display the cards in ascending numerical order. Selecting **name order** will display the card name alphabetically by last name. **Alphabetical names by department** lists cardholder names in the order programmed in **Card (Personal)** screen.



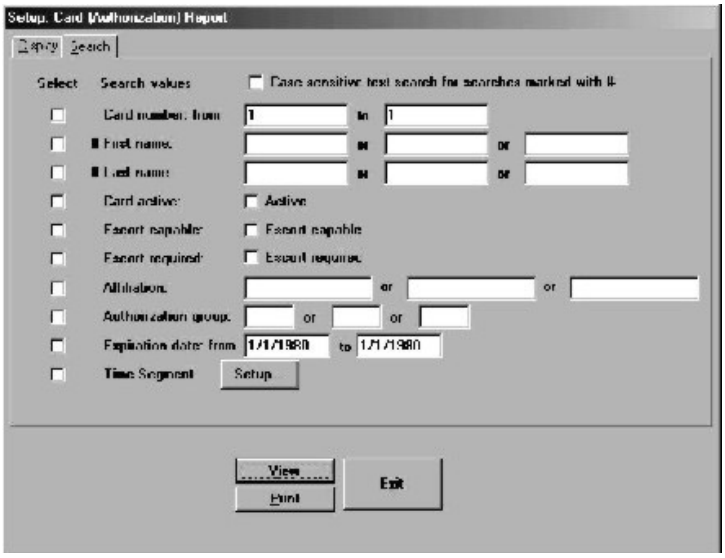
Setup: Card (Authorization) Report- Display

NOTE The **Change Heading** buttons permit the renaming of each of the field headers.

Setup: Card (Authorization)- cont'd.

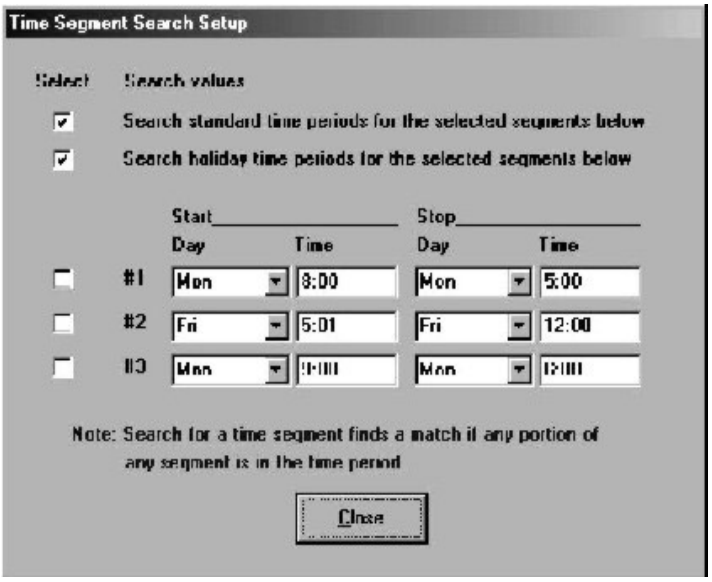
In the **Search** values parameters, note that the **Escort capable/required** options are as follows:

-For Select **[X] Escort** capable: **[ ] Escort** capable, produces only NOT escort capable designated cards
-For Select **[X] Escort** required: **[ ] Escort** required, produces only NOT escort required designated cards
-For Select **[X] Escort** capable: **[X] Escort** capable, produces only escort capable designated cards
-For Select **[X] Escort** required: **[X] Escort** required, produces only escort required designated cards
-For Select **[ ] Escort** capable: **[ ] Escort** capable, produces all non-escort capable designated cards
-For Select **[ ] Escort** required: **[ ] Escort** required, produces all non-escort required designated cards



Setup: Card (Authorization) Report- Search

At the bottom of the menu is the **Time Segment Search** option that is also contained in the **Authorization Group** report section. This option provides the operator with a means of querying the system by an instance in time rather than by **Authorization Group** definition. This is useful when it is not known what or how many authorization groups are defined to include a specific period of time. By using this resource, the block of time itself is stipulated and then the system is searched for records relevant to that period of time.

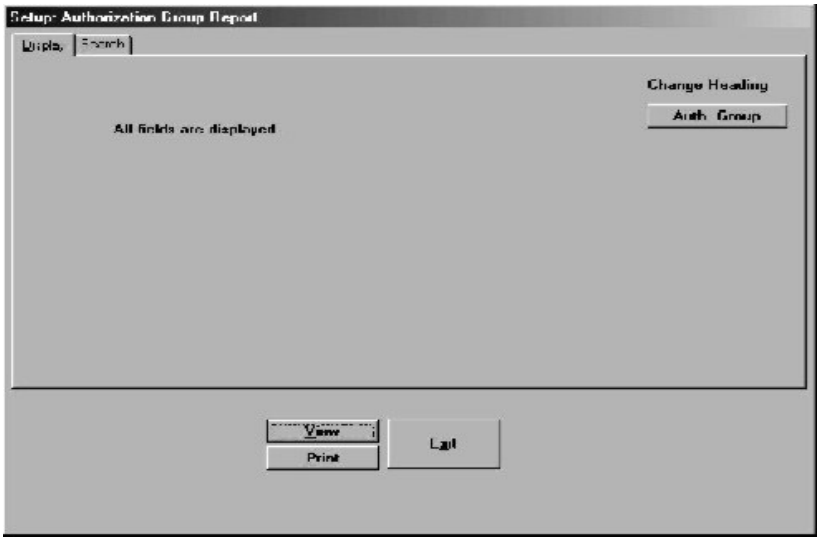


Setup: Card (Authorization) Report- Search "Time Segment Search Setup"

Authorization Group

An Authorization group describes the area and time in which a cardholder has valid access. The report can be used as follows:

1. List one or more of the **Authorization Groups** (1-2000).
2. Search for an **Authorization Group** which includes: **Time Periods**, **MicroLPM(s)**, **readers (a- l)**, and **Time Segment Setup** (search by standard and/or holiday time periods for selected segments).

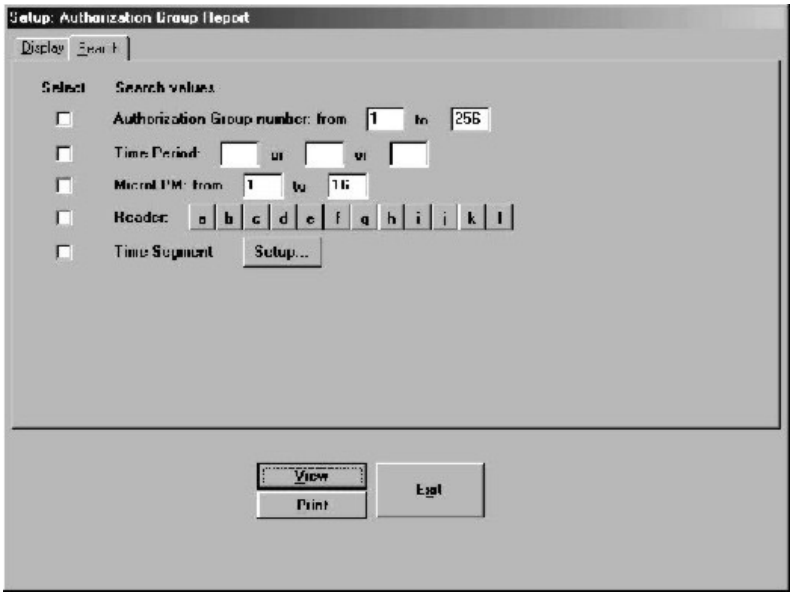


Setup: Authorization Group Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

At the bottom of the menu is the **Time Segment Search** option that is also contained in the **Card Authorization** report section. This option provides the operator with a means of querying the system by an instance in time rather than by **Authorization Group** definition. This is useful when it is not known what or how many authorization groups are defined to include a specific period of time. By using this resource, the block of time itself is stipulated and then using this resource searches the system for records relevant to that period of time.

See the **Setup: Card (Authorization) Report- Search "Time Segment Search Setup"** screen.

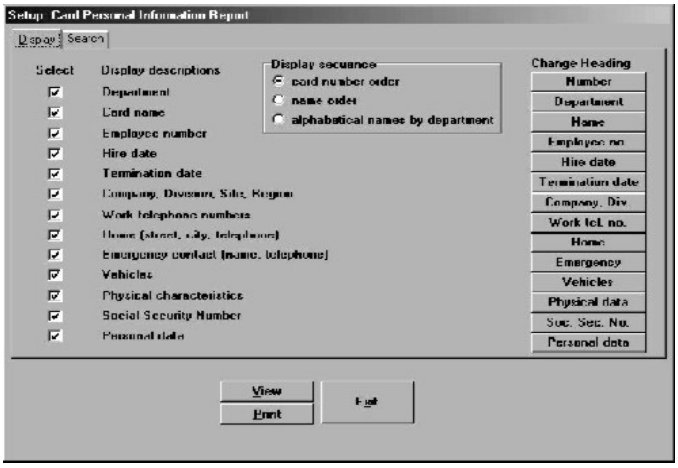


Setup: Authorization Group Reports- Search

Card (Personal)

LiNC-NET provides the user with the capability of entering personal data for each cardholder. This report can be used to:

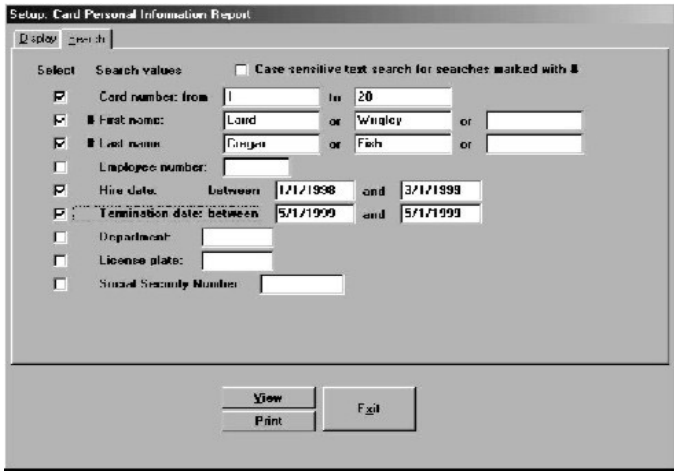
1. Look for a particular cardholder.
2. Search for a particular automobile license number.
3. Department cardholder report.
4. Access emergency contact
5. Hire and termination date



Setup: Card Personal Information Report- Display

Under **Display Sequence**, select the order option in which you want the display to appear. The default **card number order** will display the cards in ascending numerical order. Selecting **name order** will display the card name alphabetically by last name. **Alphabetical names by department** lists cardholder names in the order programmed in Card (Personal) screen.

NOTE The Change Heading buttons permit the renaming of each of the field headers.



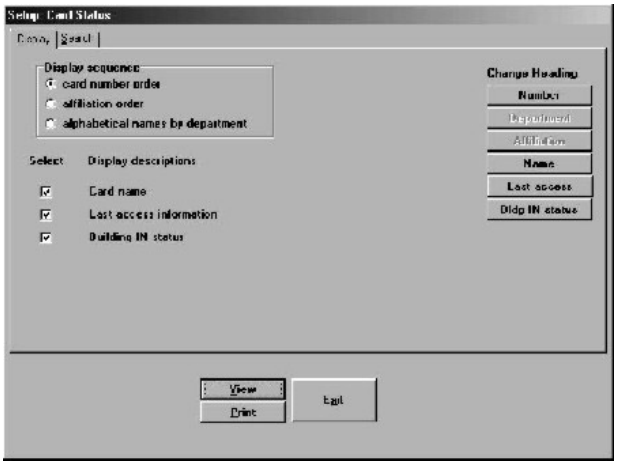
Setup: Card Personal Information Report- Search

Card Status

Card In/Out status can be reported by **Card Number**, **Affiliation**, or **Department**.

1. Card Name
2. Last Access Information
3. Building IN status (by card number, affiliation, or department).

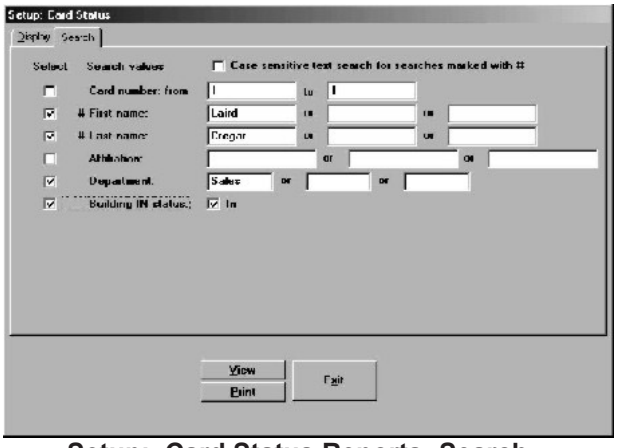
Under **Display Sequence**, select the order option in which you want the display to appear. The default **card number order** will display the cards in ascending numerical order. Selecting **affiliation order** (listed by **auth** group) will display the auth group alphabetically. **Alphabetical names by department** lists cardholder names in the order programmed in **Card (Personal)** screen.



Setup: Card Status Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

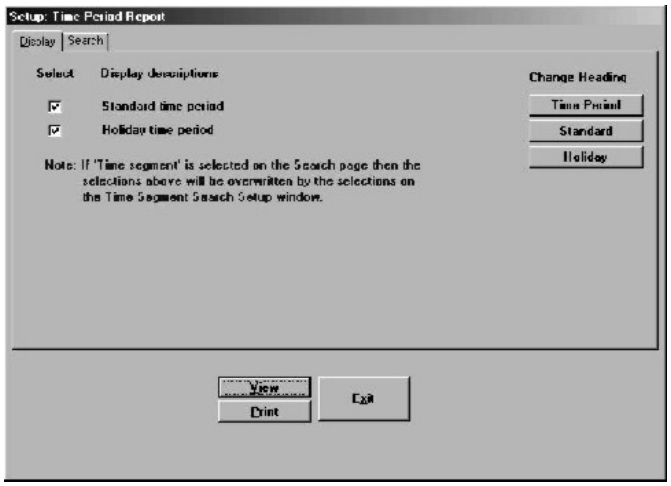
Note that the **Building IN Status** field allows the operator to perform a search report of cardholders that are in the building. This is accomplished by selecting both the **Building IN Status** and the In boxes. The **Card Status** report can also provide information about what cardholders are presently NOT in the building. This is accomplished by selecting ONLY the **Building IN Status** box, and NOT the In box.



Setup: Card Status Reports- Search

Time Period

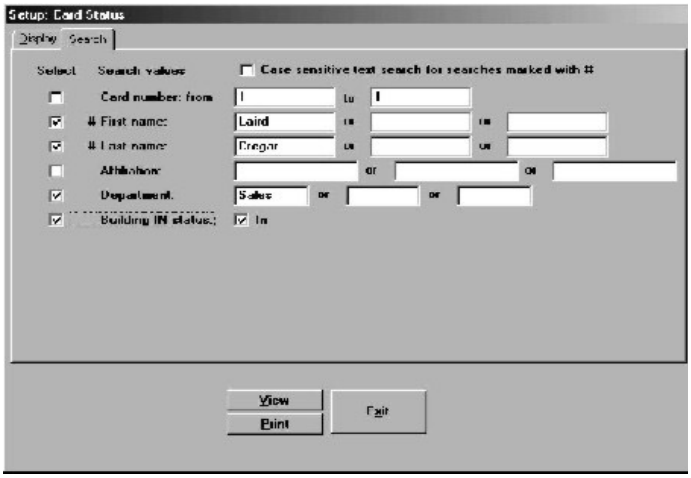
LiNC-NET uses **Time Periods** in a variety of ways, such as validating card usage, scheduling automatic door-open, and shunting alarms, to name a few. The report prints or displays the **Time Periods** (2-999) with or without its **Holiday Time Period** counterpart.



Setup: Time Period Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

At the bottom of the menu is the **Time Segment Search** option that is also contained in the **Card Authorization** and **Authorization Group** search reports sections. This option provides the operator with a means of querying the system by an instance in time rather than by **Time Period** number range. This is useful when the number of time groups is not known. By using this resource, the block of time itself is stipulated and then using this resource searches the system for records relevant to that period of time. See Setup: Card (Authorization) Report- Search “Time Segment Search Setup” screen.

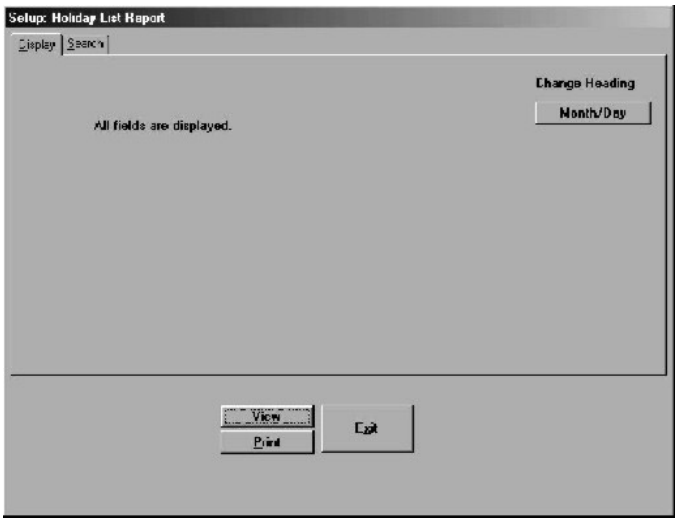


Setup: Time Period Reports- Search

Holiday List

LiNC-NET supports up to 365 days of holidays plus 1 additional day for leap year. The report will generate a list of holidays by month. The days that appear in the report are when the system will utilize the **Holiday Time Period**. The following functions are affected by holiday:

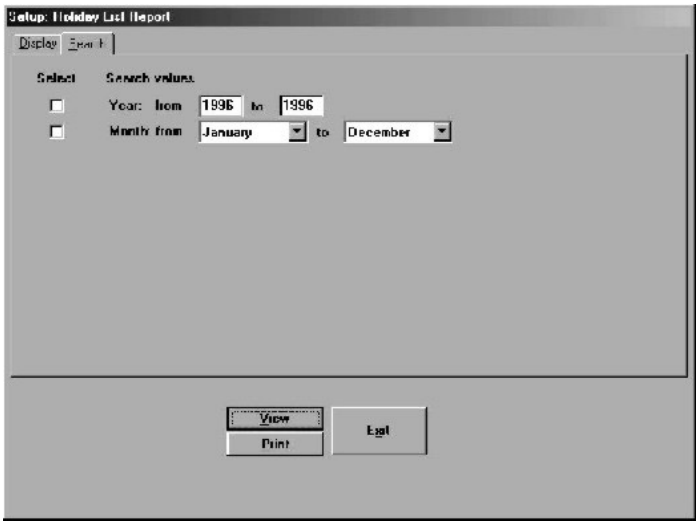
Card Access **Alarm Monitoring** **Automatic Door Open** **Inputs/Outputs** **Outputs**



Setup: Holiday List Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.

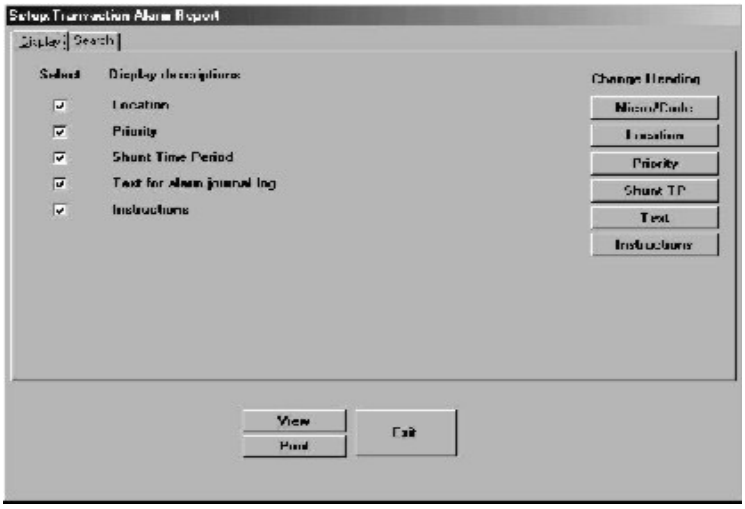
A range of up to 10 years may be searched in the **Holiday List Reports Setup** menu.



Setup: Holiday List Reports- Search

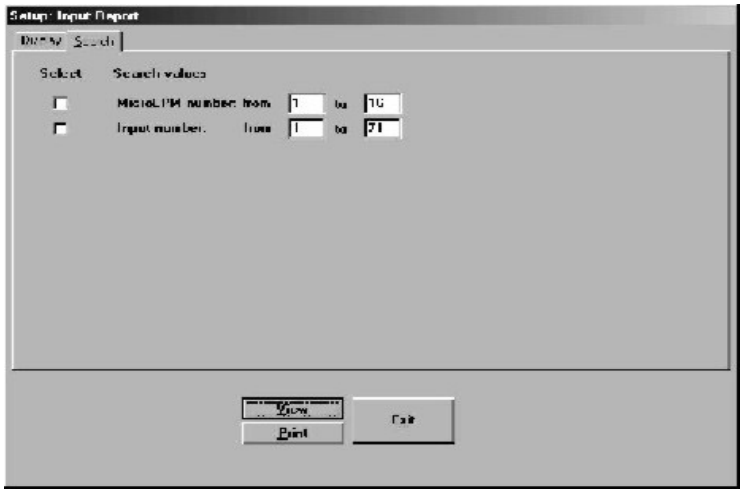
Input Alarm

If a Search is performed, only the range of sense input alarm numbers and panel numbers is user selectable. Enter the range of input numbers to be used in the search, and click on the Select box. Select the desired fields to be displayed or printed by clicking on each selected box. The report will list, in columns, all the inputs requested, and any or all of the following data: the alarm number(s) requested, the alarm location, the alarm priority number (0-7), the Shunt Time Period when the alarm is shunted (2-999), Text message which prints out to the real time printer as well as on the Transaction Alarm Log screen, and instructions which displays at the time of an alarm acknowledgment.



Setup: Sense Input Alarm Reports- Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.



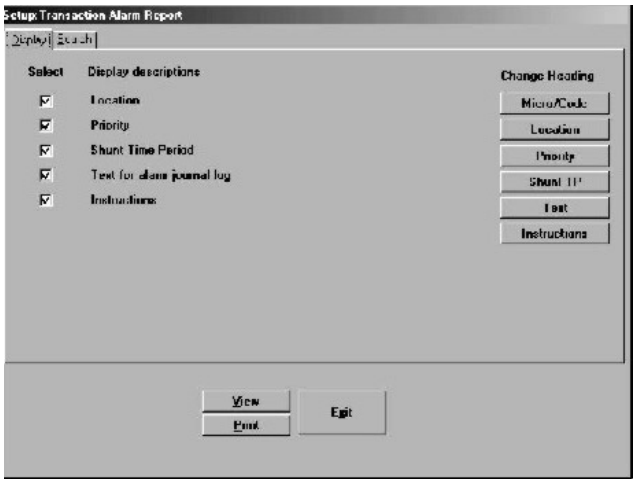
Setup: Sense Input Alarm Reports- Search

Xaction Alarm

If a Search is performed, only the range of panel numbers is user selectable. Enter the panel number(s) to be used in the search, and click on the Select box. Select the desired fields to be displayed or printed by clicking on each selected box. The report will list, in columns, all the transaction alarm numbers requested, and any or all of the following data: the alarm location, the alarm priority number, the Shunt Time Period when the alarm is shunted (1-999), Text message which prints out to the real time printer as well as on the Transaction Alarm Log screen, and instructions which displays at the time of an alarm acknowledgment.

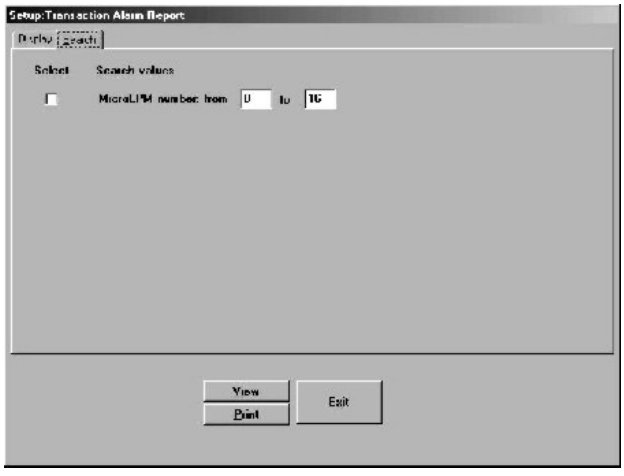
Display Options:
1. Location/Transaction Code
2. Priority
3. Shunt Time Period
4. Text for Alarm Journal
5. Instructions

Search Options:
1. MicroLPM Number



Setup: Transaction Alarm Reports-Display

NOTE The Change Heading buttons permit the renaming of each of the field headers.



Setup: Transaction Alarm Reports- Search

Part 3- Miscellaneous

Understanding Control Counters

Control Counters (CCs) provide output for relays to control door strikes, external alarm shunts/ outputs, open collector outputs, digital dialers, gates, alarm bells, lights, etc. Individual action and control are defined by the programmed parameters of the CC. Control counters can also be used for timers and counters depending on the application. The flexibility and versatility of the CC is defined as “User Programmable Logic” (UPL).

Control counter operations are divided into 3 parts:

Input Computation Output

Action of the CC is provided by card access, sense input, or by Time Period (Input). Control Counters require an “input” to provide a trigger to perform a “computation” and provide an output determined by the results of the computation.

Table of Inputs, Computations, and Outputs

Input	Computation	Output
Card Access	No Operation	Relay Output
Sense Input	Increment	Voltage Output
Time Period	Decrement	
	Increment each second	
	Decrement each second	
	Increment each minute	
	Decrement each minute	
	Clear auto Inc/Dec	
	Override Time Period for one cycle	
	Suspend Time Period Control Until a Restore	
	Restore Time Period Control	
	Energize (Load High Value)	
	De-energize (Load Low Value)	

Control Counters have user-defined values that determine when an output is to be energized or de-energized. When a CC is set to the energize level, the output associated with that CC will energize. This level is defined as the “High Value”. The Output de-energizes when the value of the associated CC is less than or equal to the “Low Value”. The “input” (card access, sense input, and time period) determines how the CC is affected.

The association of a CC to an output relay or voltage output is FIXED within the panel. For example, CC1 is the first relay on the MicroLPM PCB, designated by P5, and CC2 is the second relay on P7, and so on.

The MicroLPM board has 8 outputs (4 relays and 4 voltage outputs). The relays on the MicroLPM board are numbered 1, 2, 3, and 4, respectively, and the Voltage Outputs are numbered 13, 14,15, and 16.

Therefore, the MicroLPM is defined as having:

4 reader interfaces

8 Outputs-

4 Relays (Control Counters 1 through 4)
4 Voltage Outputs (Control Counters 13 through 16)

where Control Counter = Output number

Example CC1 = Output number 1 (relay number 1) on MicroLPM board
CC25 = Output number 25 (relay number 1) on Output board
CC13 = Output number 13 (Voltage Output) on MicroLPM

NOTE The Voltage Outputs are 12 VDC, 100-milliamp output. The MicroLPMs also have inputs that will be assigned later.

Examples

To fully understand the operations of the control counter, the user must understand the problem and goal of the application. The following examples describe how the LiNC-NET Control Counters are programmed in different applications.

EXAMPLE A: Programming an Alarm to Activate an Output Horn

For this example, we will activate a horn when someone opens the panel enclosure. The horn will be connected to Relay number 4 of the panel. Since the panel is equipped with a tamper switch, which is defined as a FIXED sense input number (13), it will be used as an "input" variable in our CC "formula". Sense inputs 1 through 12 are also fixed and defined as Supervised Reader detects for readers 1 through 12, respectively. The formula should be as follows:

Input	**Computation**	**Output**
Tamper Switch	Energize Horn	Relay 4
(Sense Input 13)	(Load High Value)	(CC4)

To program this example, the following is required:

- Select Input menu
- Enter the sense input record number for the Tamper Switch (13)
- Sense input record 13 should be defined as follows:

	CC	**Preload**	**T**	**Operation**
Normal	0	No-Load	--	None
Alarm/Ajar	4	LoadHi	--	Cl (Clear)
Trouble/Forced	0	NoLoad	--	None

NOTE This example will leave the horn ON indefinitely. The following examples will demonstrate how to time and control outputs through events.

EXAMPLE B: Program Activation of an Output Horn When a Door is Left Open

Problem: 30 second horn activation is required when a door has been left open longer than the programmed shunt time.

Solution: Door Left Open or Ajar is controlled by the door sense that is assigned to that door. The door sense is the "input" portion of the equation. The computation will involve turning on the horn through a relay for 30 seconds and then turning it off. To do so, set the CC to energize (LoadHigh Value into the CC) and decrement the CC each second until it reaches the low value, at which time it de-energizes the relay. The High Value of the CC must be set to a 30 (for seconds) and the Low Value set to 1.

-Set Sense Input
-Select Input
-Select the Sense Input record number for the door sense
-Name the Door Sense (8 characters max.)
-Check and verify polarity of door sense input
-Set Ajar CC to 4 (relay number)
-Set PreLOAD action to Energize the relay (LoadHi)
-Set Operation to decrement each second (DecSec)
-Sense input Record 13 should be defined as follows:

	CC	Preload	T	Operation
...Normal	0	NoLoad	--	None
...Alarm/Ajar	4	LoadHi	--	DecSec
...Trouble/Forced	0	NoLoad	--	None

Set CC Value:Select Input Menu
Define Control Counter Value as shown below.

Counter	Value
1 = Low	30 = High
30 = Max	8 = Preset (Preset may be ignored for this example)

NOTE CC4 is defaulted to be door strike output by LiNC-NET. It may be necessary to de-select CC4 from the Door Overview menu. Once in the menu, highlight 4 under "Control Counter" and replace it with a 0.

EXAMPLE C: Program De-activation of an Output Horn When a Door is Closed

Problem: Example B described a horn that will always activate for 30 seconds and automatically turn it off. To turn off after 30 seconds, or when the door closes (Normal status) another set of instructions is required.

Solution: Perform the same procedures as Example B. The Normal status of the door sense input is when the door is closed. This part of the sense input should be programmed as follows:

· Set CC to 4 (relay output for horn)
· Set Preload to de-energize the relay (LoadZero)
· Set Operation to stop auto-increment/decrement (CI)

	CC	Preload	T	Operation
...Normal	4	LoadZero	--	CI(Clear)
...Alarm/Ajar	4	LoadHi	--	DecSec
...Trouble/Forced	0	NoLoad	--	None

EXAMPLE D: Program Constant Activation of a Horn Until Door Closes

Problem: The door ajar horn is to stay ON until the door is closed.

Solution: To keep the horn ON until the door is closed, the 30 second timer is not required because the horn will be turned off when the door is closed. The sense-input record should be programmed as follows:

	CC	Preload	T	Operation
...Normal	4	LoadZero	--	CI(Clear)
...Alarm/Ajar	4	LoadHi	--	CI (Clear)
...Trouble/Forced	0	NoLoad	--	None

EXAMPLE D: Program Automatic Door Open During Working Hours

Problem: Automatically opening doors or gates during normal working hours.

Solution: The input for our equation is Time Period, because it will be used to control the conditions of the output. The computation involves energizing the (LoadHi) the door strike at the start of the normal working ours and de-energizing (LoadZero) the door strike at the end of the normal working hours.

The following parameters are assumed:

- Door lock is connected to relay 1 (CC1)
- Time Period 5 is set to Mon-Fri 8:00am to 5:30pm

Proceed to the Control Counter menu in Input

- Name the door
- Set CC to Class D
- Set the Time Period that will control the CC, to 5
- The control record should be as follows:

Time Period Control

Time Period Number **5**

Upon

Time Period	**Preload**	**T**	**Op**
...Entry	LoadHi	--	Clear
...Exit	LoadZero	--	Clear

EDDAT

EDDAT is a program that allows the user to translate the text files used by LiNC-NET into another language. If the directory for the data files does not exist yet, then create a directory. Refer to the Initialization Setup File (INI.edit) for LiNC-NET for Windows-NT/95/98 Language menu for instructions. To access EDDAT, click on the EDDAT icon in the LiNC-NET for Windows group.

Translate the *.dat files using EDDAT. Files accessed from 'FILES" and "LISTS' tabs must be edited before the data files are created. Other files can be edited later.

To make the edits easier, the original English text is shown in the top window and the text being edited is displayed in the bottom window. Perform the following steps for each file to be edited:

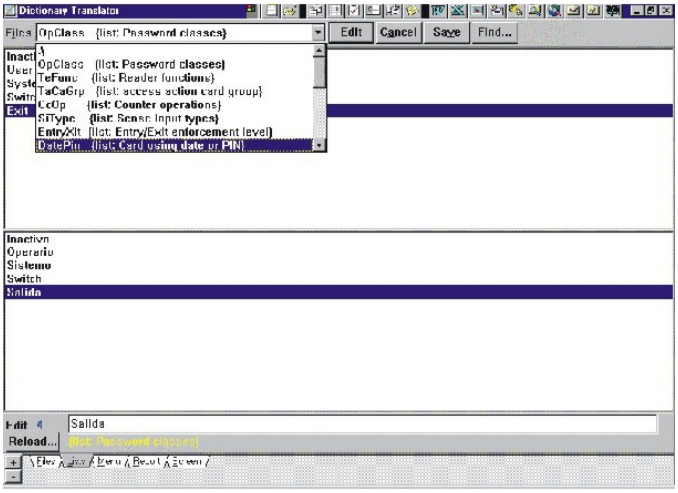
1. Select a tab at the bottom of the screen.
2. Select a file from the drop down menu.
3. Select the **Browse** button. Now the focus is on the content of the file and the up and down arrows will highlight a line in the file. The top window shows the original file and the bottom window shows your translation.
4. Highlight the line to be changed.
5. Select the **Edit** button. The cursor moves to the edit field.
6. Type the new text in the edit field.
7. Select the **Update** button to store the change in memory, or click the **Cancel** button to discard the change.

8. Repeat steps 4 through 7 for each line to be changed in this file.

9. Select the Save button to store the changes to the disk file.

Following types of text can be translated.

Fields
Menu Items
List
Report Heading
Messages, Labels and Other



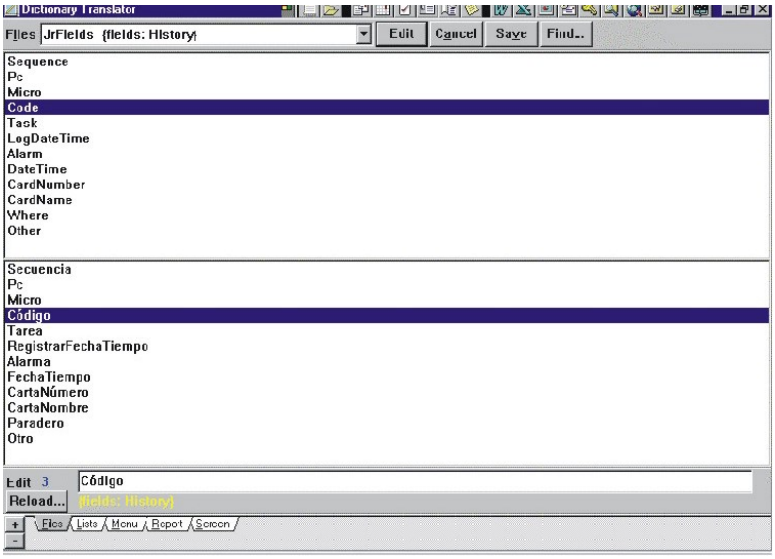
Sample screen showing pull-down menu of translatable text

Files

Under **Files,** there is only one file to select:

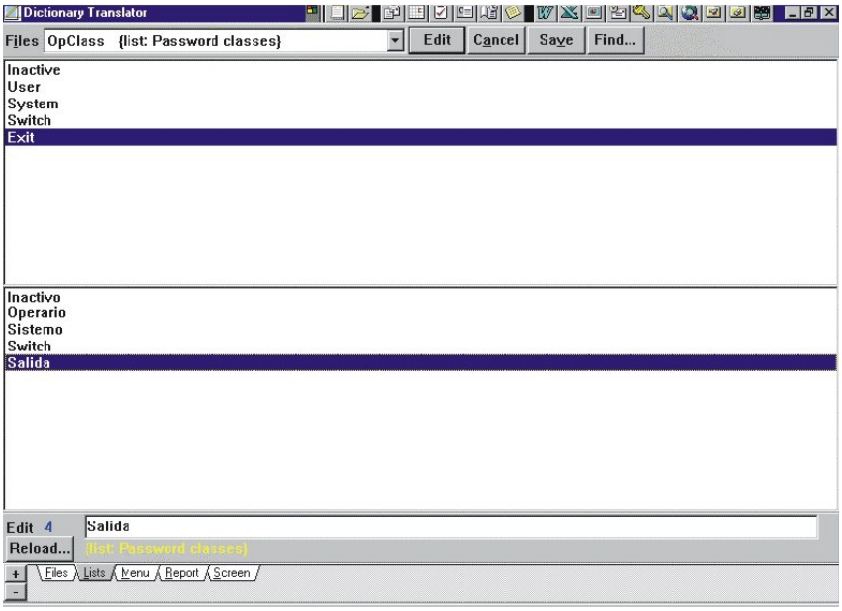
JrFields **fields: History**

In the screen example for **Files**, the Spanish translations have been entered at the lower window, by following the above instructions. In the following screens, there are several selections that contain text that may be translated. By clicking on the down arrow at the top of the screen under each tab category, the list of selections will appear.



Sample Screen Showing Journal Fields-Fields: History with Translation

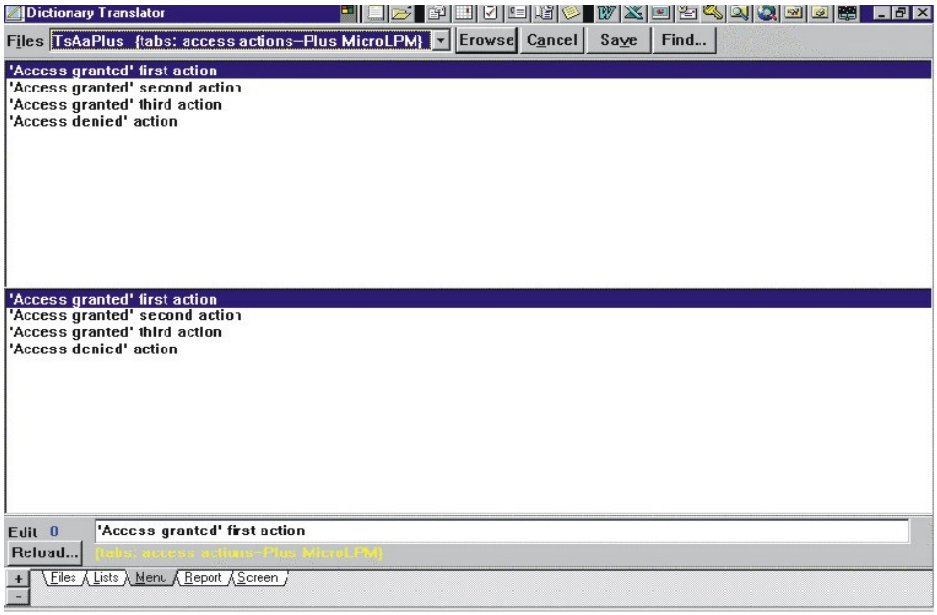
Lists



In the screen example for **Lists, OpClass** list: Password **classes** have been selected and the translatable text is listed. Under Lists, there are 21 files that contain translatable text:

OpClass	list:	Password classes
TeFunc	list:	Reader functions
TaCaGrp	list:	access action card group
CcOp	list:	Counter operations
SiType	list:	Sense Input types
EntryXit	list:	Entry/Exit enforcement level
DatePin	list:	Card using date or PIN
DatePIN	list:	Card using date or PIN
PrimXpir	list:	Card primary expiration date
TPDow	list:	Time Period day of week
Month	list:	Months of year
Dow	list:	Day of week
DowShort	list:	Day of week, abbreviated
JrCodes	list:	Journal codes
JrAlarm	list:	Journal alarm status
AaStatus	list:	Pending alarm status
SiState	list:	input status @ panel
XactAls	list:	Transaction alarm [keys]
UplodErrr	list:	Upload error codes
NoYes	list:	No, Yes
TaskComm	messages:	Task Communication

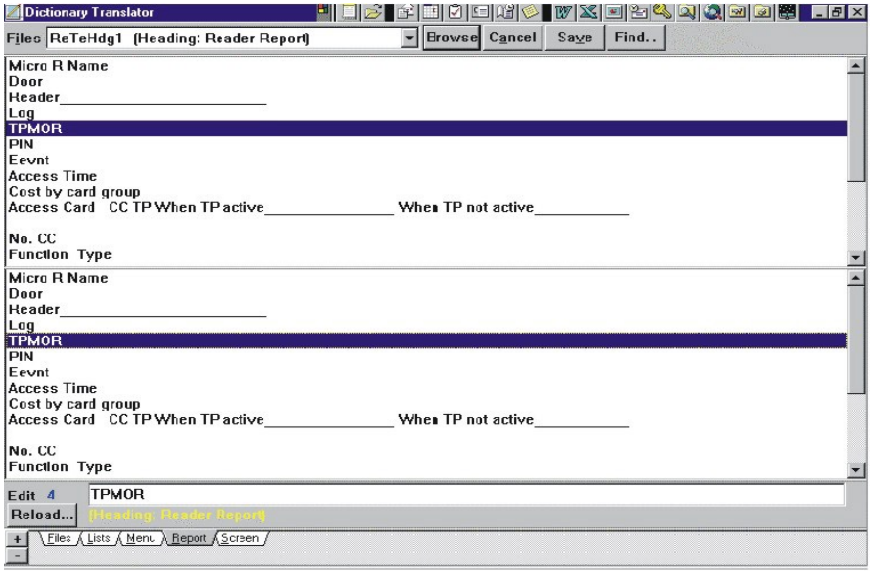
Menu Items



In the screen example for Menu, **TsAaPlus** {tabs: access actions-Plus MicroLPM} has been selected and the translatable text is listed below it. Under Menu, there are 4 files that contain translatable text:

TsAaPlus	tabs:	access actions-Plus MicroLPM
TsAaStd	tabs:	access actions-Standard MicroLPM
Umsgs	error messages	
Ulogcom	phrases used in history logs	

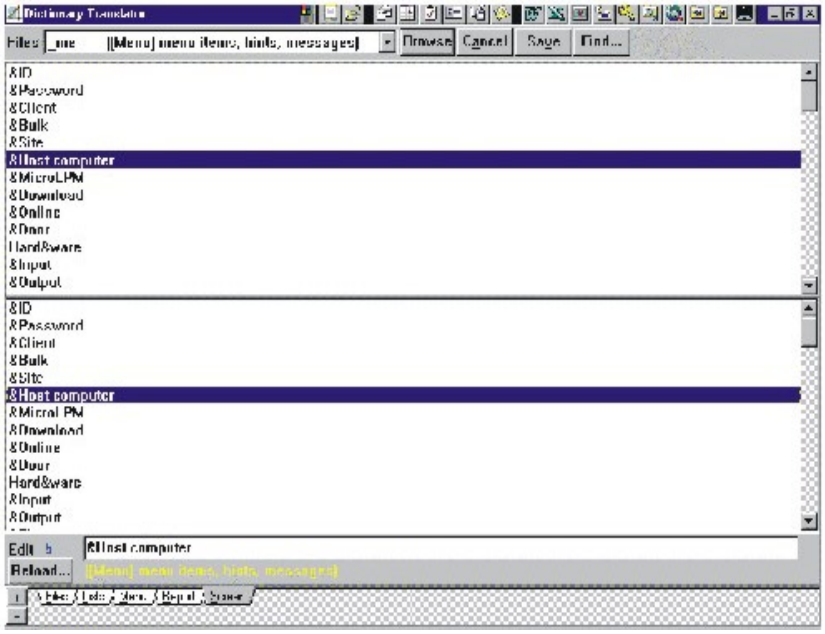
REPORT Heading



In the screen example for **Report, ReTeHdg1{Heading: Reader Report}** has been selected and the translatable text is listed below it. Under **Report**, there are 14 files that contain translatable text:

ReTeHdg1	Heading:	Reader Report
ReCcHdg1	Heading:	Output Report
ReSiHdg1	Heading:	Input Report
ReUlHdg1	Heading:	MicroLPM Report
ReCaHdg1	Heading:	Card (Authorization) Report
ReNaHdg1	Heading:	Card Personal Information Report
ReHoHdg1	Heading:	Host Report
ReAgHdg1	Heading:	Authorization Group Report
ReTpHdg1	Heading:	Time Period Report
ReHlHdg1	Heading:	Holiday List Report
ReTaHdg1	Heading:	Input Alarm Report
ReXaHdg1	Heading:	Transaction Alarm Report
ReFgHdg1	Heading:	Floor Group Report
ReKsHdg1	Heading:	Card Status Report

Screen Messages



In the screen example for Screens, {[menu] menu items, hints, and messages} has been selected and the translatable text is listed below it. Under Screens, there are 48 files that contain translatable text:

_menu	menu	items, hints, messages
umostat	menu	LiNC-NET Status
syal	menu	Alarm Definition
_sybi	menu	Bulk Initialization
_sydoov	menu	Door Overview
_syfg	menu	Floor Groups
_syin	menu	input
_syot	menu	output
_sypl	menu	Program Level
_sypw	menu	Password
_sysipc	menu	Host Computer
_sysiul	menu	MicroLPM Setup
_sygbu	menu	Back-up
_usca	menu	Add Card
_uscaac	menu	Activate/Deactivate Card
_uscaag	menu	Authorization Group
_uscafi	menu	Find Card
_uscana	menu	Personal Data
_usdocl	menu	Close Door
_usdoop	menu	Open Door
_ustiho	menu	Holiday List
_ustitp	menu	Time Period
_usuldl	menu	Download to panel, Upload from panel
_usulol	menu	Panel Online
ualarm		Alarm
ulog	Logger	main form

ulogflds	Logger	Fields (order & width)
Ure	Report	menu items
Urestrs	Report	button captions, messages...
uresetup	Report	Font and lines per page
urehdr	Report	Heading and Column Width Definition
ureag	Report	Setup: Authorization Group Report
ureca	Report	Setup: Card (Authorization) Report
urecc	Report	Setup: Output Report
urefg	Report	Setup: Floor Group Report
urehl	Report	Setup: Holiday List Report
ureho	Report	Setup: Host Report
urejr	Report	Setup: History Report
ureks	Report	Setup: Card Status
urena	Report	Setup: Card Personal Information Report
uresi	Report	Setup: Input Report
ureta	Report	Setup: Sense Input Alarm Report
urete	Report	Setup: Reader Report
uretp	Report	Setup: Time Period Report
uretpx	Report	Setup: Time Segment Search Setup
ureul	Report	Setup: MicroLPM Report
urexa	Report	Setup: Transaction Alarm Report
finddat	FindDat	captions & messages

Dictionary Translator: FindDat

FindDat is a program that allows the user to find translated as well as untranslated text in the EDDAT database. To access FindDAT, click on the FindDAT icon in the LiNC-NET for Windows group. FindDAT can also be accessed within the EDDAT program by clicking on the Find button.

Perform the following steps for each word or text to be searched:

1. Click on the Find button in FindDAT or EDDAT and a pop-up menu will appear.

2. Enter the word or text that you wish to find, e.g., card, history, name, etc.

3. Select [4] Use original files, if you wish to search for the untranslated original text. Or do not select this option if you wish to find translated text.

4. Click on the First button and the program will locate the first appearance of the word or text.

5. Next click on the Next button and the program will locate the next occurrence of the word or text.

6. Continue clicking on the Next button until all occurrences of the word or text has been found.

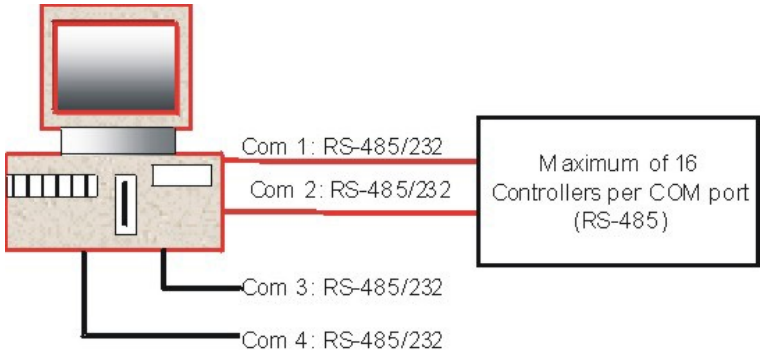
7. The FindDAT program allows the user to locate and change translations without going through each screen one by one.

8. Repeat steps 1 through 6 for each word or text in your search.

9. Select the Save button to store changes to the disk file.

Communication between LiNC-NET for Windows-NT/98 and the Panels

LiNC-NET for Windows-NT/95/98 can communicate to the panel(s) via 4 loops. Each loop occupies one COM port. COM ports 1 through 4 should be used. Each loop can be configured for RS-485 or RS-232. RS-485 cabling length is 4,000 ft. maximum.



LiNC-NET Initialization of Direct Connect Panels

Access the Site/Host Computer Menu:

Click on **Site** or the **Site** icon, and then **Host**. The Host Computer menu will appear. To select the **Loop/Port** page, click on the **Loop/Port** tab and the parameters will be displayed. LiNC-NET will support up to 64 **Direct Connect** control panels. These may be distributed among the 4 possible communication (COM) ports displayed. A COM port may be either an RS-232 or an RS-485 serial communication loop (channel). While up to 16 panels may share a single RS-485 loop, only one panel may reside on an RS-232 loop. Furthermore, an RS-232 loop may be of an overall distance of 25 feet prior to implementing modems or line drivers that will extend this limitation. Still, only a single panel may reside on an RS-232 channel regardless of the length of the data loop. Alternatively, if the RS-485 loop distance should exceed its 4,000-foot limit, line drivers or a repeater may be implemented while preserving the capabilities of up to 16 panel(s) on the channel. The maximum number of Direct Connect panels supported by LINC-NET is 64, regardless of which protocol is used.

The default configurations for the COM ports on a standard PC are:

COM port #1 = IRQ4 COM port #2 = IRQ3

When adding RS-485 boards or auto dial modems and more COM ports are required, the following configuration should be used:

COM port #3 = IRQ5 COM port #4 = IRQ11

This will eliminate a conflict between the COM ports. A change of an IRQ to a specific COM port may require a jumper change and/or a change in the control panel (PORTS) to the desired IRQ.

To assign a COM port for panel data exchange click on the down arrow button and the COM port box will appear. Highlight the appropriate selection, and click once to close the box. The COM port field will now display the communications port that you have specified.

To specify the type of connection for the above COM port click on the **Type of Connection** field. Click on the box to access the pop up box. Using the up/down keys highlight the **Direct Connection** selection and click the mouse. The **Type of Connection** field will now display the **Direct** type of connection between the PC and the panel(s).

To specify the Baud rate for PC to panel communications, click on the Baud Rate field to access the pop up box. Highlight the **9600** selection and click the mouse. The Baud rate field will now display the **9600-baud** rate for communications between the PC and the panel(s).

To write this information to the system, click on the [√] mark in the navigator box on the upper left side of the screen. All data entered will be written to the hard disk drive. This is reflected by the check mark changing to a gray tone.

The panel must now be defined in the LINC-NET database. (This procedure may be by-passed if the panel has already been defined).

This is accomplished by clicking on the **Add/Delete MicroLPM** tab. Highlight the MicroLPM field by pressing the Tab key once. Using the numeric keys, type the MicroLPM number (address) for the panel that is to be defined in the LINC-NET database. Click on the **Add MicroLPM** button. The panel specified will now be included in the LINC-NET database.

To include additional panels in the LINC-NET database, repeat the steps above. Note that up to 64 total panels may be supported in this release. The panel's address may be any value between 1 and 64, although every panel address must be unique.

Now that the communication port and panels have been defined in the LINC-NET database, communications between these two devices may be established. This is accomplished by pressing **<Alt>** and then **L.** This will clear the screen and log the user off. The signon screen will now appear. Terminate LINC-NET by entering the **Exit** class password. The Windows-NT/95/98 Desktop menu will appear. Click on **Lnwredir** to restart LINC-NET. This will load the application software and initialize the **COM** ports previously defined for direct connect communications to the panel(s). When completed, the LINC-NET sign on screen will be displayed. Log back on with the password and the Systems Administrator page will appear.

The final phase of implementing Host PC to panel communications is to request that the panels be brought on-line.

Access the User mode by clicking on User at the command line. Click on the **Define MicroLPM Online Status** button to access the **MicroLPM On-line** page. At the bottom of the page are panel tables illustrating the address(es) of the panel(s) defined previously in the database. Click on the mouse once and a page of panels defined within the LINC-NET database will be displayed. Click on the appropriate box next to each panel. Placing an **X** in the box indicates that the panel has been selected to be on-line for data exchange with the Host PC. To the right of the screen is the **MicroLPM Status** field. It should transition from **Off-line** to **On-line** indicating that successful communications have been established between the Host and the panel PCB. Repeat the previous steps until all required **Direct Connect** panels are communicating with the Host PC.

Date Format Modification (for expiration date into the year 2000)

From the Windows-NT/95/98? screen, click on the **Start** button. Move the cursor to **Settings**, and in the sub-menu-listing click on **Control Panel**. In the **Control Panel** group, double-click on the **Regional Settings Properties** icon to enter the menu.

Select the file tab for **Date** format. The date format menu has two sections. For short date, select either M/d/yyyy or MM/dd/yyyy. For long date style, any choice will display the 4-digit year format. These selections will allow the dates to display the full year (example, 90 vs. 1990) and exceed the year 2000. After the changes have been made, select the OK buttons and close the Control Panel.

Restart Windows-NT/95/98 to have this change occur. Access LiNC-NET for Windows-NT/95/98, check expiration dates for accuracy within the **Card Add/Change** screens.

Adding a Client Database

NOTE This resource is not available in a LiNC-NET Multi-user system.

Before a client database can be created, two things must occur:

1. The Main Database must be created. If this has not yet been done, then refer to the LiNC-NET software installation section before proceeding.
2. Once the main database has been created the Windows 95/98/NT Operating system must be configured to permit all data and program files stored in the PC to be displayed when accessing the **Explorer**. Refer to the appropriate section below and configure the **Explorer** accordingly.

Configuring Windows 98 to Display All Files

1. From the Windows 98 desktop, right-click on the Start button.
2. Left-click on the **Explorer** option- the **Explorer** application will open.
3. Located in the upper left corner of the screen is the Menu bar, left-click on the View selection. Left-click on **Folder Options** to display the **Folder Options Menu.**
4. Left-click on the **View File** tab.
5. Under the **Files and Folders-Advanced** settings, confirm that only the **Show File Attributes in Detail View** is selected. Under **Hidden Files**, confirm that only **Show All Files** is selected.
6. Click on the OK button.
7. Close the Explorer.

Adding Facility Code for Client

Copy **Faccode.sys** from the LiNC-NET 5.10.01 CD to a diskette. Rename the diskette file to the Client name with the extension of .CLI. (Examples: **PCSC.CLI** or **6565.CLI**). Copy the **Clients.CLI** file to the **C:\ProgramFiles\PCSC\5_10_1** folder (Default location of where LiNC-NET Program Files are stored on a standalone system). Client names must follow standard DOS conventions.

1. Click on **Start/Programs/5_10_1/ConfigLN**. The ConfigLN screen will now appear.

2. Click on the **Clients in Use (Not Allowed on Network)** field located in the **Data Base** section. Doing this will place a check in the box and a **Database** box will appear in the upper left side of the screen.

3. Click on the **Clients** button within the **Database** box and a dot will appear in the circle to the left of the word **Client**.

4. Click on the **Write** button.

5. Click on the **Create** button located in the **Data Base** section of the screen. The **Create Data Base** screen will now be displayed.

6. Enter the client's name in the **Client** box.

7. Click on the **Add Client** button. The client's name will now appear in the **Current Client** list box.

8. Click on the **MicroLPM** folder and define each panel as required.

9. Click on the **Files** tab. Click on the **Select All** button and all check boxes will be checked indicating that all files are selected for creation.

10. Click on the **Main** folder. Click on the **Start** button to begin creating the **Client Database.** The screen will illustrate the action of the files actually being created.

11. When the **Client Database** has been created, click on the **Client** folder.

12. Click on the client's name in the **Current Client** list box, and the clients database files will now be displayed in the **Files (for Current Client)** box.

13. Click on the client's name located in the **List of Lincnetw** files box.

14. Click on the **Transfer** file button. And the clients facility code (PCSC.CLI or 6565.CLI) is now transferred to the client database.

15. Click on the Main folder. Click on the Exit button and the Create Data Base screen will close. The ConFigLN screen will now be displayed.

16. Click on the **Exit** button to close the **ConFigLN** screen and return to the desktop.

This concludes the addition of the **Client Database procedure.**

NOTE Launch the LiNC-NET 5.11.2 program and notice that at the sign-on screen contains a Client box where the option for accessing the Main Data Base (when client box is blank) or the Client Data Base (when client box contains the clients name).

When logging onto the client database for the first time, use the default ID (**0**) and password (**PYMTF**).

Proceed with standard customary programming within the **Client Database**.

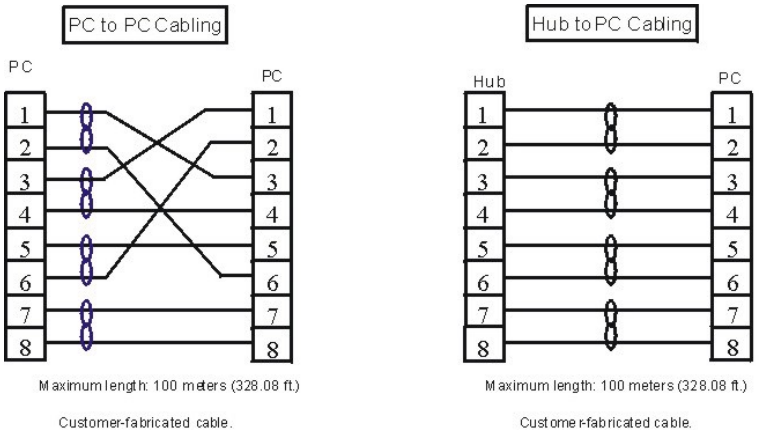
LiNC-NET Multi-User Systems

LiNC-NET NT System

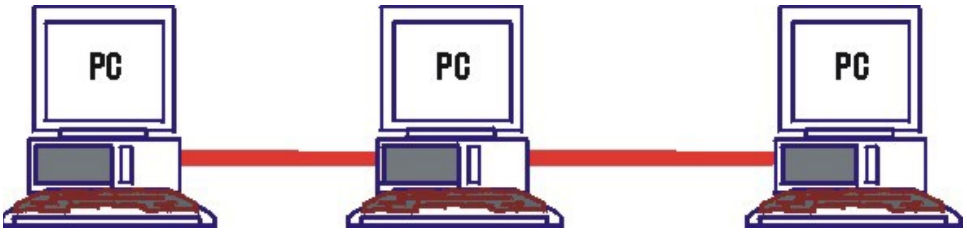
In a LiNC-NET NT Multi-User configuration, one PC is designated as a Host and all others are identified separately as Guard or WorkStations. Each Station can modify the data files that are maintained by the Host. All the panels are connected to the Host PC. The Guard Stations communicate to the Host through the use of LiNC-NET for Windows NT software.

The hardware required for networking LiNC-NET NT:

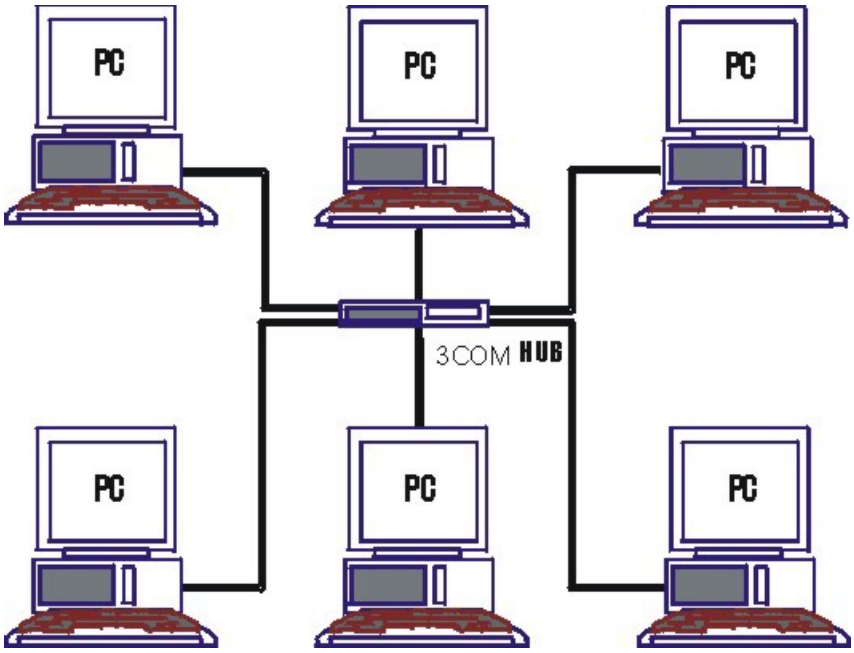
1. 3Com 3C00 TPO Network Interface Card
2. Category 5 twisted-pair 10 base T Network cable, 4 pairs (Plenum or PVC)
3. 3Com Office Hub (For more than 2 LiNC-NET NT Stations)



PC to PC Cabling



Hub to PC Cabling



Updating/Upgrading to LiNC-NET for Windows NT version 5.11.2

The following procedures are compatible for both LiNC-NET for Windows 95 and Windows 98 upgrades, in addition to previous versions (5.05.02 - 5.10.01) of LiNC-NET NT.

Before beginning the update/upgrade procedures, you should back-up both the LiNC-NET Program Files and the Data files. This precaution will allow you to have all prior LiNC-NET information archived should any mishap occur during the update.

Backup:

Standalone System

LiNC-NET Data Files -At the LiNC-NET PC create a folder Windows 95/98/NT) on the Hard Disk drive to preserve the currently used data files. This folder should be named Backup. Then copy all data to the backup folder.

Example

Copy **C:\LiNC-NETW\Files** (Default location of currently used Data Files)to **C:\Backup** (folder to store current data)

Or

Copy **C:\Program Files\PCSC\5.07.01\Files** (Default location of currently used data files) to **C:\Backup** (folder to store current data)

Multi-User System

LiNC-NET Data Files -At the LiNC-NET PC create a folder Windows 95/98/NT) on the Hard Disk drive to preserve the currently used data files. This folder should be named Backup. Then copy all data to the backup folder. In a Multi-User LiNC-NET system, the data files are stored in a shared folder. This folder is called Files (By Default) and this folder is mapped to a Network Drive. Copy the contents of the shared folder Files to the Backup folder.

Example

Copy **C:\Files** (Default location of currently used Data files) to **C:\Backup** (folder to store current data)

This will preserve the existing database in case of any problems during the upgrade. You may now proceed to the update/upgrade procedure.

Step A Click on the **Start-Programs-LiNC-NET-INI**. If you have LiNC-NET version 5.08.01 already installed, you will need to observe the Directory of Database field.

Example It will display **C:\LnwFiles** (Default for stand-alone system)
or
T: (Default location for a multi-user system)

In either of the above cases, the location of where the LiNC-NET data files are stored should be noted. As it will be needed after loading the LiNC-NET 5.10.01 software.

Step B Install the software as described at the beginning of this manual.

For a multi-user system the Borland Database will need to be configured to permit the LiNC-NET Database to be shared from a mapped network drive. This is accomplished by setting the NET DIR parameter to **T:** (See the **software installation** section of this manual for configuring the Borland database).

For a stand-alone system the Borland Database will need to be configured to permit the LiNC-NET Database to not be shared from a mapped network drive. This is accomplished by setting the NET DIR parameter to **C:** (See the software installation section of this manual for configuring the Borland database).

Step C Click on **Start-Programs-LNv5.11.2-ConFigLN.** Using the noted location of where the LiNC-NET data files reside (refer to Step A). LiNC-NET 5.10.01 is configured to point to the existent database. Located in the **Database** section, click on the **Find Folder** button. Select the appropriate hard disk (example **C:** or **T:**) and if applicable, click on the appropriate folder and the existing LiNC-NET database files will be viewed on the right side of the screen. Click on the **File** option of the **Get Data Base** directory dialog box. Click on the **OK** option. The **Get Data Base** directory dialog box will close and the screen will return to the ConFigLN page. The Data Base section will now reflect the location of the pre-existing database as noted in Step A. Click on the **Write** button to record the modifications of the **ConFigLN** to the Hard Drive.

NOTE If this is a multi-use system, click on the **Use Shared Drive** field. Also click on the LiNC-NET on Network button located in the **Task Communi cation** section. To record the changes made to ConFigLN, click on the **Write** button.

Step D To permit the now upgraded LiNC-NET for Windows (version 5.11.2) software to use the pre-existing LiNC-NET data, the database will now have to be reorganized. Located in the Database section, click on the Create button. This brings u p the Create DataBase screen.

Extreme care must be exercised to prevent accidentally erasing LiNC-NET data. If this should occur, the previous backup will need to be restored before proceeding!

Select the MicroLPM's folder. Click on the Scan button.

Select the Files folder. Click on the Select All button.

Select the Reorg file tab. Click on the Start Reorg button. The screen will momentarily flash and the hard drive will be accessed as the LiNC-NET Database is reorganized.

When the hard drive stops, click on the Files tab. Click on the Deselect All button. Refer to the upgrade reference chart to determine which files must be selected to complete the upgrade process. Note that this is determined based upon the original software version that was installed prior to upgrading to 5.11.2. Click on the appropriate file(s) ONLY according to the chart. If an inappropriate file is accidentally selected, clicking on it again will deselect it.

Upgrade Reference Chart - Required Files to be Created from Earlier Versions

*When upgrading from versions 5.04.03, 5.04.05, 4.04.01-4.05.02, to **5.11.2**, the old **proglev.db** file will be deleted. An icon will appear in its place. This icon will reside in the LiNC-NET NT program called PROGRAM LEVELS. A copy of t**he old Prog**lev.db must be made to assure accuracy when keying information into the program levels field.

Once all appropriate files have been selected, click on the **Main** folder. Click on the **Start** button. The screen will flash as the selected files are created. When the process is complete the screen will clear. Click on the **Exit** button to return to **ConFigLN.**

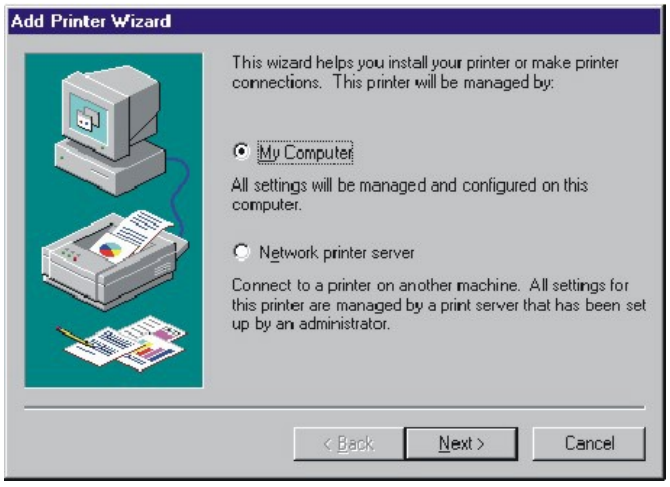
Click on the **Exit** button again to return to the desktop. This completes the upgrade procedure. LiNC-NET 5.11.2 should now be launched and after logging on, verify that all previous information was retained. If necessary, re-add the **Program Level** information in th**e Program Leve**l screen.

Printer Text Setup

To set the proper printer text, click on the Windows **My Computer** icon and double-click on **Printers icon.**

Double-click on the **Add Printer** icon.

Follow the prompts in the **Add Printer Wizard** file. Select **Generic/Text Only** or the Manufacture/ Model that correctly identifies your printer. Press **Install.** The text setting is now defined.


Add Printer Wizard
This wizard helps you install your printer or make printer connections. This printer will be managed by:
My Computer
All settings will be managed and configured on this computer.
Network printer server
Connect to a printer on another machine. All settings for this printer are managed by a print server that has been set up by an administrator.
< Back
Next >
Cancel

Step 8-Worksheets

Bulk Initialization Worksheet

Bulk Change

Card Technology

Format _____ (see below formats)

Door LockAccessTime

Standard* _____ (1-253 [2-253 for elevator readers])

Long* _____ (2-254 [3-254 for elevator readers])

Card Table Format

Primary Expiration

(Park/global) _____(Global, ParkOnly)

PIN or Parking Reader

expiration date _____ (Date, PIN)

Names for Cardholders

exist [ ] Yes [ ] No

12-digit card numbers [ ] Yes [ ] No

Daylight Savings

**Start _____/_____/____ (mm/dd/yyyy)

**Stop _____/_____/____ (mm/dd/yyyy)

Entry/Exit Enforcement

Parking _____ (Off, Soft, Lenient, Strict)

Department _____ (Off, Soft, Lenient, Strict)

Building _____ (Off, Soft, Lenient, Strict)

*Standard access time is always programmed less than Long access time.

**Dates are in month (mm)/day(dd)/ year (yyyy) format where the number of characters per field is 2 digit month, 2 digit day, and 4 digit year.

Formats - PIN_PAD, Protech (Hughes ID), Protech (I), Protech/PIN_PAD, Protech/PIN-PAD (I), Magstripe, Magstripe (I), Magstripe/PIN_PAD, Magstripe PIN_PAD (I), Watermark, Watermark (I), Watermark/PIN_PAD, Watermark/PIN_PAD (I), PCSC-Wiegand, Wiegand/PIN_PAD, Indala, Indala/PIN_PAD, 12-digit, 12-digit (I), 12-Digit/PIN_PAD, 12-Digit PIN_PAD (I), Sensor-26, Sensor-26/PIN_PAD, Sensor-34, Sensor-34/PIN_PAD, Special, Special/PIN_PADPCSC-37, PCSC-37/PIN_PAD, CORP-1000, CORP_1000/PIN_PAD, Motorola-32, Motorola-32/PIN_PAD,

Host Computer Worksheet

Loop/Port

*Loop to COM port assignment

Loop 1 _____ (NotInUse, COM1- COM13)
Loop 2 _____ (NotInUse, COM1- COM13)
Loop 3 _____ (NotInUse, COM1- COM13)
Loop 4 _____ (NotInUse, COM1- COM13)
Loop 5 _____ (NotInUse, COM1- COM13)
Loop 6 _____ (NotInUse, COM1- COM13)
Loop 7 _____ (NotInUse, COM1- COM13)
Loop 8 _____ (NotInUse, COM1- COM13)
Loop 9 _____ (NotInUse, COM1- COM13)
Loop 10 _____ (NotInUse, COM1- COM13)
Loop 11 _____(NotInUse, COM1- COM13)
Loop 12 _____(NotInUse, COM1- COM13)
Loop 13 _____ (NotInUse, COM1- COM13)

Modem Dial Out

**COM port _____ (NotInUse, COM1-COM13)

Port Configuration

COM Port 1
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 2
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming): (_____) _____ - _____ (20 characters max.)
COM Port 3
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 4
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 5
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 6
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming): (_____) _____ - _____ (20 characters max.)
COM Port 7
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)

COM Port 8
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 9
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 10
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming): (_____) _____ - _____ (20 characters max.)
COM Port 11
Type of connection _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 12
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)
COM Port 13
Type of connection: _____ (NotInUse, Direct LAN, Modem)
BAUD rate _____ (1200, 2400, 4800, 9600)
***Telephone number (incoming) (_____) _____ - _____ (20 characters max.)

Modem Initialization for all 1-13

About
Photo Trace Enabled [ ] Yes [ ] No
LiNC-NET Version
Address
Street:_____ (20 characters max.)
City: _____ _(20 characters max.)
1st telephone number (_____) _____ - _____ (20 characters max.)
2nd telephone number (_____) _____ - _____ (20 characters max.)
Add/Delete MicroLPM

Select model type from the following: None, Custom, MicroLPM, MicroLPM-8, MicroLPM-12, MicroOUT, MicroOUT-8, MicroALM, MicroALM-8, MicroSAM, MicroSAM-8, MicroSAM2, MicroSAM2-8, MicroELV, MicroELV2, MicroELV3, MicroELV4, IQ200, IQ200/SAM, IQ200/SAM2, IQ600, IQ600/SAM2, IQ1000, IQ1000/SAM, IQ1000/SAM2, ULTIMATE, ULTIMATE 8, ULTIMATE 12, ULTIMATE/SAM, ULTIMATE8/SAM, ULTIMATE12/SAM, ULTIMATE/SAM2, ULTIMATE 8/SAM2, ULTIMATE 12/SAM, SIM 32

Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
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Panel (Number) 1-200_____
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Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____
Panel (Number) 1-200_____
Model _____
Concentrator #_____

For panel s that are not going to be installed, set their model to “None”.
*Each loop (that is utilized) is assigned a unique COM port.
**The MODEM dial out COM port must be one that is defined (in the type of connection section) as a “MODEM”.
***The telephone number (incoming) is only used for COM ports defined as a “MODEM” connection

Panel Setup Worksheet

Panel Number(1-200)_____
Panel Name _____(8 characters max.)
Concentrator Number(1-20)_____
Features
Password: _____ (12 characters max.)
DaylightSavings
Enter*_____/_____/____ (mm/dd/yyyy)
Exit* _____/_____/____ (mm/dd/yyyy)
Entry/Exit Enforcement
Parking_____(Off, Soft, Lenient, Strict)
Department_____(Off, Soft, Lenient, Strict)
Building _____(Off, Soft, Lenient, Strict)
Card Table Forma
Primary Expiration
(Park/Global) _____(Global, ParkOnly)
PIN or Expiration Date (parking readers) _____ (Date, PIN)
Names for Cardholder
Exist [ ] Yes [ ] No
12-digit Card Numbers [ ] Yes [ ] No
Renewable Shunt [ ] Yes [ ] No
Duress event
CC (Control Counter) _____ (0-40)
Preload_____ (see below preloads)
T (Time Period does not have priority) [ ] Yes [ ] No
Operation _____ (see below operations)
Hardware
Host Connection
Primary Loop _____(see below loops)
LAN Connection
IP Address_____
IP Port_____
LAN Connection_____
Ultimate_____
Black Box_____
Lantronix_____
Port
Bulk Download [ ] Yes [ ] No
Modem Control (if primary loop is modem)**
Outgoing Calls
Secondary Loop_____(see below loops)
History Transfer
Time Period _____ (0-999)
Backlog Threshold***_____ (0-4000)
Incoming Calls
Telephone number (____) _____-_____(20 characters max.)

Expansion Boards
Model _____ (see below models)

[ ] 1st Cluster	[ ] 2nd SAM	[ ] ELV
[ ] 2nd Cluster	[ ] OUT #1/ALM	[ ] OUT #3
[ ] 1st SAM	[ ] OUT #2	[ ] OUT #4

Tamper Detect
Input: 13 (Do not modify the tamper detect sense input number)
Printer BAUD _____ (1200, 2400, 4800, 9600)
Address
Street _____ (20 characters max.)
City_____ (20 characters max.)
Contact
Name (person to contact) _____ (20 characters max.)
Telephone (telephone number of contact) _____(20 characters max.)

preloads - NoLoad, LoadZero, LoadLow, LoadHigh, LoadMax, AddPreset, FlipOutput
Operations - None, Decrement, DecrementSec, DecrementMin, Clear, Increment, Increment Sec, IncrementMin, OverrideTp, TpSuspend, TpResume
loops - NotInUse, Loop1, Loop2, Loop3, Loop4

*Dates are in month (mm) / day(dd) / year(yyyy) format where the number of characters per field is 2 digit month, 2 digit day, and 4 digit year.
**This section is only displayed if the specified Primary loop is defined as “Modem”.
***To prevent overwriting of history transactions it is suggested that threshold is programmed to be at half the total capacity of the history buffer. Refer to document (number 39-10043-001) “MicroLPM Standard and Plus Cards Capacity Determined by Firmware Versions”.

MicroLPM Models

Model	Expansion Boards
MicroLPM	(No expansion boards are selected for this model)
MicroLPM-8	Cluster #1
MicroLPM-12	Cluster #1 & #2
MicroOUT	Out #1
MicroOUT-8	Cluster #1 & OUT #1
MicroALM	ALM
MicroALM-8	Cluster #1 & ALM
MicroSAM	SAM #1
MicroSAM-8	Cluster #1 & SAM #1
MicroSAM2	SAM #1 & #2
MicroSAM2-8	Cluster #1, SAM #1 & #2
MicroELV	OUT #1
MicroELV2	OUT #1 & #2
MicroELV3	OUT #1, #2, & #3
MicroELV4	OUT #1, #2, #3, & #4
IQ200	(No expansion boards are selected for thismodel.)
IQ200/SAM	SAM #1
IQ200/SAM2	SAM #1 and #2
IQ 600	Cluster #1
IQ600/SAM	Cluster #1 and SAM #1
IQ600/SAM2	Cluster #1 and SAM #1 and #2
IQ1000	Cluster #1 and #2
IQ1000/SAM	Cluster #1 and #2 and SAM #1
IQ1000/SAM2	Cluster #1 and #2, SAM #1 and #2
ULTIMATE	(No expansion boards are selected for this model.)
ULTIMATE8	Cluster #1
ULTIMATE 12	Cluster #1 and #2
ULTIMATE/SAM	SAM #1
ULTIMATE 8/SAM	Cluster #1 and SAM #1
ULTIMATE 12/SAM	Cluster #1 and #2, SAM #1
ULTIMATE/SAM2	SAM #1, and #2
ULTIMATE 8/SAM 2	Cluster #1 and SAM #1 and #2
ULTIMATE 12/SAM 2	Cluster #1 and #2 and SAM #1 and #2
SIM 32	(No cluster boards are selected for this model.)

Reproduce this sheet for each panel defined in the LiNC-NET system.

Door Overview Worksheet (First Reader)

Panel Number (1-200) _____
Door Number* (1-2400) _____
Door Name _____ (8 characters max.)

Reader Selection

First Reader_____ (a, b, c, d, e, f, g, h, I, j, k, l)

Time Related (First Reader) [Standard values are smaller than long values]

Time Duration (seconds) [access time is always programmed less than shunt time]

Standard Access_____(1-253) [2-253 for elevator readers]
Standard Shunt _____(2-254) [3-254 for elevator readers)
Long Access _____(2-254) [3-254 for elevator readers)
Long Shunt _____(3-255) [4-255 for elevator readers]
Egress (Unlock)_____(1-253) [egress uses Standard shunt]
Time Period Control
Time Period for PIN PAD Disable _____ (0-999)
Time Period for Auto Unlock _____ (0-999)

Hardware (First Reader)

Connections
Door Lock (door output)_____ (0-31)
Log (lock activity) [ ] Yes [ ] No
Normally Open (relay) [ ] Yes [ ] No
Class (door output)_____ (D, AD, BD, ABD, CD, ACD, BCD, ABCD)
Door Sense (input) _____ (0, 16-71)

Normally Closed (Input) [ ] Yes [ ] No Maglock (magnetic lock): [ ] Yes [ ] No

Reader (First Reader)

Log (reader activity) [ ] Yes [ ] No
Function (first reader) _____(see below function)
Type (first reader)_____ (see below type)
Egress (Input) _____ (0, 16-71)

Log (Egress Activity) [ ] Yes [ ] No Normally Open (egress) [ ] Yes [ ] No
Energize on Egress [ ] Yes [ ] No

Alarm Control

External Shunt [is not available if local alarm function is selected]
Output (ext. shunt) _____ (0-40)
Log (shunt activity) [ ] Yes [ ] No
Local Alarm [is not available if external shunt function is selected]
**Duration (seconds) of Local Alarm _____ (1-254)
Shunt Time Period _____ (0-999)
Buzzer Off Upon Shunt Timer Expiration [ ] Yes [ ] No

Features (First Reader)

Access Lockout
Event Lockout Counter _____ (0-40)
Two Person Minimum Occupancy [ ] Yes [ ] No
Two Person Minimum Occupancy Counter_____ (0-40)

Access Cost for Card Group

None	_____	(0-999)
A	_____	(0-999)
B	_____	(0-999)
AB	_____	(0-999)

Function AccessIn, AccessOut, Access, ParkIn, ParkOut, ParkInOut, BldgIn, BldgOut, BldgInOut, DeptIn, DeptOut, DeptInOut, Elevator, NotUsed

Type- PIN_PAD, ProTech (Hughes ID), ProTech (I), ProTech/PIN_PAD, ProTech/PIN_PAD (I), MagStripe, MagStripe (I), MagStripe/PIN_PAD, MagStripe PIN_PAD (I), Watermark, Watermark (I), Watermark/PIN_PAD, Watermark/PIN_PAD (I), PCSC-Wiegand, Wiegand/PIN_PAD, Indala, Indala/PIN_PAD, 12-Digit, 12-Digit (I), 12-Digit/PIN_PAD, 12-Digit PIN_PAD (I), Sensor-26, Sensor-26/PIN PAD, Sensor-34, Sensor-34/PIN_PAD, Special, Special/PIN_PAD, PCSC-37, PCSC37/PIN_PAD, Corp-1000, Corp-1000/PIN_PAD, Motorola-32, Motorola-32/PIN_PAD

Access Actions (First Reader)

“Access Granted”First Action (“Every Access”)

Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____(All A, B, Escorted)
Time Period Control
Time period_____ (0-999)
When time period Active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
When time period Not active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)

“Access Granted” Second Action (“Card Group A Access”)

Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____(All A, B, Escorted)
Time Period Control
Time period_____ (0-999)
When time period Active
Preload_____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation_____ (see below operations)
When time period Not active
Preload_____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation_____ (see below operations)

“Access Granted”Third Action (“Card Group B Access”)

Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____(All A, B, Escorted)
Time Period Control
Time period _____ (0-999)
When time period Active
Preload_____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation_____ (see below operations)
When time period Not active
Preload _____ (see below preloads)
Time period does Not have priority [ ] Yes [ ] No
Operation_____ (see below operations)

“Access Denied” Action (“Denied Access”)

Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____(All A, B, Escorted)
Time Period Control
Time period _____ (0-999)
When time period Active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)

When time period NOT active
Preload _____ (see below preloads)
Time period does NOT have priority [ ] Yes [ ] No
Operation _____ (see below operations)

preloads - NoLoad, LoadZero, LoadLow, LoadHigh, LoadMax, AddPreset, FlipOutput
operations - None, Decrement, DecrementSec, DecrementMin, Clear, Increment, Increment Sec, IncrementMin, OverrideTp, TpSuspend, TpResume

*Door numbers are grouped in multiples of twelve per panel panel.
**Duration of local alarm activation is always programmed to be at least one second less than the specified shunt time.
***The Class-H control counter is only available in plus-type MicroLPMs

Door Overview Worksheet (Second Reader)

Reader Selection

Second Reader**** _____ (a, b, c, d, e, f, g, h, I, j, k, l)
Time Related (Second Reader) [Standard values are smaller than Long values]
Time Duration (seconds) [access time is always programmed less than shunt time]
Standard Access_____ (1-253) [2-253 for elevator readers]
Standard shunt is common to both the first and the second readers.
Long Access_____ (2-254) [3-254 for elevator readers]
Long shunt is common to both the first and the second readers.
Egress (unlock) is common to both the first and the second readers.

Time Period Control

Time period for PIN pad disable _____ (0-999)
Time period for auto unlock is common to both the first and the second readers.

Hardware (Second Reader)

Connections
Door Lock (door output) _____ (0-31)
Log (lock activity) [ ] Yes [ ] No
Normally Open (relay) [ ] Yes [ ] No
Class (door output) _____ (D, AD, BD, ABD, CD, ACD, BCD, ABCD)
Door Sense (input) _____ (0, 16-71)
Normally Closed (input) [ ] Yes [ ] No
Maglock (magnetic lock) [ ] Yes [ ] No

Reader (Second Reader)

Log (reader activity) [ ] Yes [ ] No
Function(Second Reader) _____ (see below function)
Type (Second Reader)_____ (see below type)
Egress (input) _____ (0, 16-71)
Log (egress activity) [ ] Yes [ ] No
NormallyOpen (egress) [ ] Yes [ ] No
Energize on Egress [ ] Yes [ ] No

Alarm control is common to both the first and the second readers.
Local alarm is common to both the first and the second readers.

Features (Second Reader)

Access Lockout
Event lockout counter _____ (0-40)
Two person minimum occupancy [ ] Yes [ ] No
Two person minimum occupancy counter_____ (0-40)
Access Cost for Card Group
None _____ (0-999)
A _____ (0-999)
B _____ (0-999)
AB _____ (0-999)

Function- AccessIn, AccessOut, Access, ParkIn, ParkOut, ParkInOut, BldgIn, Bld gOut, BldgInOut, DeptIn, DeptOut, DeptInOut, Elevator, NotUsed

Type- PIN_PAD, Protech (Hughes ID), Protech (I), Protech/PIN_PAD, Protech/,PIN-PAD (I), MagStripe, MagStripe (I), MagStripe/PIN_PAD, MagStripe/PIN_PAD (I), Watermark, Watermark (I), Watermark/PIN_PAD, Watermark/PIN_PAD (I), PCSC-Wiegand, Wiegand/PIN_PAD, Indala, Indala/PIN_PAD, 12-Digit, 12-Digit (I), 12-Digit/PIN_PAD, 12-Digit PIN_PAD (I), Sensor-26,Sensor-26/PIN_PAD, Sensor-34, Sensor-34/PIN_PAD, Special, Special/PIN_PAD, PCSC_37, PCSC_37/PIN_PAD, Motorola-32, Motorola-32/PIN_PAD

****Second reader is always different from the first reader although they both operate the same door.

Access Actions (Second Reader)

"Access Granted" First Action ("Every Access")
Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____ (All A, B, Escorted)
Time Period Control
Time Period _____(0-999)
When time period Active
Preload _____ (see below preloads)
Time period does Not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
When Time period Not active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
"Access Granted" Second Action ("Card Group A access")
Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____ (All A, B, Escorted)
Time Period Control
Time Period _____(0-999)
When time period Active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
When Time period Not active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
"Access Granted"Third Action ("Card Group B access")
Counter*** _____ (0-40, A, B, C, D, H)
Card Group (Plus MicroLPM Only) _____ (All A, B, Escorted)
Time Period Control
Time period _____(0-999)
When time period Active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____(see below operations)
When Time period Not active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____ (see below operations)
"Access Denied" Action ("Denied Access")
Counter*** _____ (0-40, A, B, C, D, H)
Card group (Plus MicroLPM Only) _____ (All A, B, Escorted)
Time Period Control
Time period _____(0-999)
When time period Active
Preload _____ (see below preloads)
Time period does not have priority [ ] Yes [ ] No
Operation _____(see below operations)

When Time period Not active
Preload _____ (see below preloads)
Time period does Not have priority [ ] Yes [ ] No
Operation _____(see below operations)

preloads - NoLoad, LoadZero, LoadLow, LoadHigh, LoadMax, AddPreset, FlipOutput
operations - None, Decrement, DecrementSec, DecrementMin, Clear, Increment, Increment Sec, I ncrementMin, OverrideTp, TpSuspend, TpResume

***The Class-H control Counter is only available in plus-type MicroLPMs.

Input Worksheet

Panel _____ (1-64)
Number _____ (1-71)(72-119)
Floor Button Type
Elv Only Firmware 5.x.
Type Not in use: Alarm, Event, Input Switch, ELV Control, Floor Button
Name _____ (8 character max.)
Output Action
Upon Condition
Normal / Closed
Counter _____ (0-40, A, B, C, D)
Preload _____ (see below preloads)
T (Time Period does not have priority) [ ] Yes [ ]No (select one)
Operation: _____ (see below operations)
Alarm / Ajar
Counter _____(0-40, A, B, C, D)
Preload _____ (see below preloads)
T (Time Period does not have priority) [ ] Yes [ ] No (select one)
Operation _____ (see below operations)
Shunt by Time Period _____ (0-999)
Shunt by Counter _____ (0-40, A, B, C, D)
Trouble / Forced
Counter _____ (0-40, A, B, C, D)
Preload _____ (see below preloads)
T (Time Period does not have priority): [ ] Yes [ ] No (select one)
Operation: _____ (see below operations)

preloads - NoLoad, LoadZero, LoadLow, LoadHigh, LoadMax, AddPreset, FlipOutput
operations - None, Decrement, DecrementSec, DecrementMin, Clear, Increment, IncrementSec, IncrementMin, OverrideTp, TpSuspend, TpResume

Reproduce this sheet for each input in every panel within the LiNC-NET system.

Output Worksheet

Number* _____ (1-88)
Name _____ (8 characters max.)
Class** _____ (see below classes)
Inverted (deenergize Upon activation) [ ] Yes [ ] No
Log it [ ] Yes [ ] No
Time Period Control
Time period _____ (0-999)
At Segment Start
Preload_____ (see below preloads)
T (Time period does not have priority) [ ] Yes [ ] No (select one)
Operation_____ (see below operations)
At segment stop
Preload_____ (see below preloads)
T (Time period does not have priority) [ ] Yes [ ] No (select one)
Operation _____ (see below operations)

Counter Static Values***

Low	_____	(0-32699) [0 for elevator counters] (OTPMOR)
High	_____	(1-32700)..[2 for elevator counters] (2TPMOR)
Max	_____	(1-32700) [32700 for elevator counters]
Preset	_____	(0-32700) [8 for elevator counters]

*For non-elevator types of panels, the range of control counters that may be programmed is 1-40.

**Classes - None, A, B, AB, C, AC, BC, ABC for non-door counters, and D, AD, BD, ABD, ABCD, CD, ACD, BCD for door counters. (Counters assigned to doors may NOT have their class altered within the output setup menu. Door counters are assigned a class within the Door Overview/Hardware screen.)

preloads - NoLoad, LoadZero, LoadLow, LoadHigh, LoadMax, AddPreset, FlipOutput

Operations - None, Decrement, DecrementSec, DecrementMin, Clear, Increment, Increment Sec, IncrementMin, OverrideTp, TpSuspend, TpResume

*** The Low value is always programmed less than the High value.
The High value is always programmed less than or equal to the Max value.

The Preset value may be programmed for any value within the range of Control Counter values.

Only counters not assigned to doors may have their values altered within the output setup menu.

Reproduce this sheet for each control counter in every panel within the LiNC-NET system.

Elevator Relay to Control Counter Cross Reference Table

Relay #	CC#	Output Board #	Relay #	CC#	Output Board #
1	25	1	17	41	2
2	26	1	18	42	2
3	27	1	19	43	2
4	28	1	20	44	2
5	29	1	21	45	2
6	30	1	22	46	2
7	31	1	23	47	2
8	32	1	24	48	2
9	33	1	25	49	2
10	34	1	26	50	2
11	35	1	27	51	2
12	36	1	28	52	2
13	37	1	29	53	2
14	38	1	30	54	2
15	39	1	31	55	2
16	40	1	32	56	2

Relay #	CC#	Output Board #	Relay #	CC#	Output Board
#33	57	3	49	73	4
34	58	3	50	74	4
35	59	3	51	75	4
36	60	3	52	76	4
36	61	3	53	77	4
38	62	3	54	78	4
39	63	3	55	79	4
40	64	3	56	80	4
41	65	3	57	81	4
42	66	3	58	82	4
43	67	3	59	83	4
44	68	3	60	83	4
45	69	3	61	85	4
46	70	3	62	86	4
47	71	3	63	87	4
48	72	3	64	88	4

Floor Groups Worksheet

Floor Group
Number _____ (0-251) Name_____ (20 characters max.)
Panel
Number _____ (1-200) Name _____ (8 characters max.)

Relays (OUT #1: 25-40)= MicroELV4, MicroELV3, MicroELV2, and MicroELV1 Relay

25 Floor (name)_____ (20 characters max.)
Floor accessible[ ] Yes [ ] No (select one)
Reader _____ (A, B, C, D, None)

26 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

27 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

28 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

29 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

30 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

31 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

32 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

33 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

34 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

35 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

36 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

37 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

38 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

39 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

40 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

Relays (OUT #2: 41-56) = MicroELV4, MicroELV3, MicroELV2 (ONLY!) Relay

41 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one) Reader_____ (A, B, C, D, None)
42 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
43 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
44 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
45 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
46 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
47 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
48 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
49 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
50 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
51 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
52 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
53 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
54 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
55 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)
56 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

Relays (OUT #3: 57-72) = MicroELV4 and MicroELV3 ONLY!!! Relay

57 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

58 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

59 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

60 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

61 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

62 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

63 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

64 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

65 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

66 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

67 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

68 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

69 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

70 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

71 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

72 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

Relays (OUT #4: 73-88) = MicroELV4 (ONLY!) Relay

73 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

74 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

75 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

76 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

77 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

78 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

79 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

80 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

81 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

82 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

83 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

84 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

85 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

86 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

87 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, None)

88 Floor (name)_____ (20 characters max.)
Floor accessible [ ] Yes [ ] No (select one)
Reader_____ (A, B, C, D, NoneReproduce this sheet for each Floor Group programmed into the LiNC-NET system.

Add Card /Change Card Worksheet

Card Number*_____ up to 5 digits (1-65000)
First name_____ (32 characters max.)
Last name_____ (32 characters max.)

Normal Access
*Card active [ ] Yes [ ] No
Long access [ ] Yes [ ] No

Capable to Override
Event lockout [ ] Yes [ ] No
Access-cost [ ] Yes [ ] No

Escort...
Capable [ ] Yes [ ] No
Required [ ] Yes [ ] No

Exempt from Entry /Exit
Building/Department [ ] Yes [ ] No
Park [ ] Yes [ ] No
Card group_____ (A, B, AB, None)
Affiliation _____ (0-255)***
Class-H counter number/class _____ (0-40, A, B, C, D)
*PIN _____-_____-_____-_____ (4 digits)

Authorization Group*
#1 (First) _____ (1-2000)
Name _____ (20 character max.)

#2 (Second) _____ (1-2000)
Name _____ (20 character max.)

#3 (Third) _____ (1-2000)
Name _____ (20 character max.)

#4 (Fourth) _____ (1-2000)
Name _____ (20 character max.)

Expiration Date(s)*
Primary** _____/_____/____ (mm/dd/yyyy)
Secondary** _____/_____/____ (mm/dd/yyyy)

Elevator Control*
#1 (First) Time Period_____ (0-999)
FloorGroup _____ (0-251)
#2 (Second) Time Period _____ (0-999)
Floor Group _____ (0-251)
#3 (Third) Time Period _____ (0-999)
FloorGroup _____ (0-251)
#4 (Fourth) Time Period _____ (0-999)
Floor Group _____ (0-251)

*Denotes fields that must be defined in order to make card operational
**Dates are in month (mm)/day (dd)/year (yyyy) format where the number of characters per field is 2-digit month, 2-digit day, and 4-digit year.
***Up to 255 total affiliations may be defined, but they may be labeled as any number from zero to ninety-nine thousand nine hundred and ninety-nine.
Reproduce this sheet for each card to be programmed into the LiNC-NET system

Password Worksheet

Password ID* _____ (0-999)

Password _____ (8 characters max.)

Valid time period _____ (0-999)
Program level** _____ (0-99)
Minutes _____ (0-32767)
Class _____ (Inactive, User, System, Switch, Exit)

*A total of 1000 unique passwords may be programmed.
**Refer to “Setting Program Levels” manual (P/N 39-10041-001) for explanation of this resource.

Reproduce this sheet for each password programmed into the LiNC-NET system

Alarm Definition Worksheet

Panel _____ (1-200)

Sense Input Alarms
- Number _____ (1-71)
- ELV Floor Button Type
- (72-119) Elevator Only Firmware 5.x.x
- Shunt time period _____ (0-999)
- Priority* _____ (0-7)
- Map/Javelin Number
- Location_____ (20 characters max.)

Text for alarm history log _____
_____
(55 characters max.)

Instructions (45 characters max., per line)

Line #1_____
_____
Line#2. _____
_____
Line#3. _____
_____
Line#4. _____
_____
Line#5. _____
_____
Line#6. _____
_____
Line#7. _____
_____
Line#8. _____
_____
Line#9. _____
_____
Line#10._____
_____
Line#11._____
_____
Line#12._____
_____
Line#13._____
_____
Line#14._____
_____
Line#15._____
_____

*Priority 0 is the highest, and 7 is the lowest.

Reproduce this sheet for each sense input programmed on every panel in the LiNC-NET system

Transaction Alarms-Host

Host Transactions
Code _____ ____ (see below codes)
Shunt Time Period _____ (0-999)
Priority* _____ (0-999)
Location _____ (20 characters max.)

Text for Alarm history Log_____
_____(55 characters max.)

Instructions (45 characters max., per line)

Line#1. _____
_____
Line#2. _____
_____
Line#3._____
_____
Line#4._____
_____
Line#5._____
_____
Line#6._____
_____
Line#7._____
_____
Line#8._____
_____
Line#9._____
_____
Line#10_____
_____
Line#11_____
_____
Line#12_____
_____
Line#13_____
_____
Line#14_____
_____
Line#15_____
_____

Host Codes - Anomaly, Disk Error, History Full, LiNC-NET system start, Operator Signoff, Operator Signon, Operator Signon Fail, Start of Day

*Priority 0 is the highest, and 7 is the lowest.

Reproduce this sheet for each Host Transaction alarm programmed in the LiNC-NET system

Transaction Alarms-MicroLPM

Panel (Number) _____ (1-200)

Panel Transactions
Code_____ (see below codes)
Shunt Time Period_____ (0-999)
Priority* _____ (0-7)
Location_____ (20 characters max.)
Text for Alarm History Log _____
_____(55 characters max.)

Instructions (45 characters max., per line)
Line#1._____
_____
Line#2._____
_____
Line#3._____
_____
Line#4._____
_____
Line#5._____
_____
Line#6._____
_____
Line#7._____
_____
Line#8._____
_____
Line#9._____
_____
Line#10_____
_____
Line#11_____
_____
Line#12_____
_____
Line#13_____
_____
Line#14_____
_____
Line#15_____
_____

MicroLPM Codes - Auth & Escortd, Auth Escort, Authorized, Building Entry Error, Building Exit Error, Card Trouble, Communication Error, Cost > Credit, Data Disparity, Database Corrupt, Date/Time Change, Daylight Savings, Department Entry Error, Department Exit Error, Duress, Entry/Exit Error, Escort Required, Event Lockout, Expired Card, Host Logoff, Host Logon, Host Timout, Inactive Card, Invalid Reader, Invalid Time, MicroLPM Down, MicroLPM Up, Not an Escort, PIN Entry Error, PIN Retry Error, Park Entry Error, Park Exit Error, Soft Entry/Exit Error, System Fault, System Restart, TPMOR Auth1, TPMOR Auth2, TPMOR Violation, Undefined Card, Upload Error

*Priority 0 is the highest, and 7 is the lowest.

Reproduce this sheet for each panel transaction alarm programmed on every panel in the LiNC-NET system.

DEFAULT Program Level Assignments

Side	Menu	Submenu	Program Level
System	Bulk	Init	98
System	Site	Host	98
System	Site	MicroLPM	98
System	Door	Overview	98
System	Hardware	Input	98
System	Hardware	Output	98
System	Hardware	FloorGroups	98
System	Card	Add	98
System	Card	Change	98
System	Card	LiNC-ID	98
System	Integrity	Upload	98
System	Integrity	Backup	98
System	Password		98
System	Alarm		98
User	Card	Change	98
User	Card	AuthGroup	98
User	Card	ActiveStatus	98
User	Card	Personal	98
User	Card	Find	98
User	Time	TimePeriod	98
User	MicroLPM	Online	98
User	MicroLPM	DownLoad	98
User	Door	Open	98
User	Door	Close	98
Both	SwitchTo	Report	98
Both	SwitchTo	Alarm	98
Both	SwitchTo	Logger	98

Program Level Data Entry Worksheet

(Confidential when filled in)

Side	Menu	Submenu	Program Level
System	Bulk	Init	___
System	Site	Host	___
System	Site	MicroLPM	___
System	Door	Overview	___
System	Hardware	Input	___
System	Hardware	Output	___
System	Hardware	FloorGroups	___
System	Card	Add	___
System	Card	Change	___
System	Integrity	Upload	___
System	Integrity	Backup	___
System	Password		___
System	Alarm		___
System	Card	LiNC-ID	___
User	Card	Change	___
User	Card	AuthGroup	___
User	Card	ActiveStatus	___
User	Card	Personal	___
User	Card	Find	___
User	Time	TimePeriod	___
User	Time	HolidayList	___
User	MicroLPM	Online	___
User	MicroLPM	DownLoad	___
User	Door	Open	___
User	Door	Close	___
User	Status	Door	___
User	Status	Inputs	___
User	Status	Outputs	___
Both	SwitchTo	Report	___
Both	SwitchTo	Alarm	___
Both	SwitchTo	Logger	___

Password Menu

Data Entry and Modification in the Password Menu

To display or make modifications to LiNC-NET for WINDOWS Password menu, follow these instructions:

1. Click on to the block that you wish to modify using the mouse or use the Tab key from the keyboard.
2. Position the cursor at the data field that you wish modify or add to, and highlight the field by clicking on the block.
3.
    a) The password blocks require that the operator enter the data. (Example: For the password ID block, enter 2). Enter the data then press the Tab key to advance.
    b) For the side (System, User, or Switch for both) or for Inactive or Exit, click on the button adjacent to the selection.
    c) The navigator bar is located at the top of the file. Select the operation from the choice descriptions given below.

a. Set the current record to the first record.
b. Set the current record to the previos record.
c. Set the current record to the next record.
d. Setthe current record to the last record.
e. Add a new reocrd.
f. Delete the current record.
g. Put the dataset in Edit state so that thecurrent reocrd can bemodified.
h. Write changes to the database.
i. Cancel editr to the current record.
j. Refresh the current record.

Find the record selection and write to the database once completed. The data is now written to the system record and will be reflected to the user upon return to the opening password menu. Logoff to return to that screen. All configurations should now be programmed into LiNC-NET for Windows NT.

Program Level Worksheet

(Confidential when filled in)

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

Password ID # _____ Password: _____
Time Period: _____ Program Level: _____

End of Manual

May 2000